**IMPROVEMENTS IN B.T.C. HOTELS**

*See Page 3*

MODERN TRANSPORT

*"THE TIMES" OF THE TRANSPORT WORLD*

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**NEW RANGE FROM KEW**

*See Page 7*

# CURRENT TOPICS

### Changed Use of A-Licences

MOUNTING fears in the road haulage industry arising out of the current attitude of licensing authorities to substantial departures from the "normal user" declared in applications for A-licences will not be allayed but rather heightened by the decision of the Transport Tribunal in the Knight case reported last week. The Tribunal has underlined the decision in Williams (1955) that a licensing authority is empowered to refuse to grant or to renew an A-licence if the holder has used a vehicle or vehicles for purposes other than those specified in a previous application. But it has carried things very much further than this by ruling that "previous conduct of the applicant," which by section 6(2) of the Road and Rail Traffic Act, 1933, is a matter to which the licensing authority shall have regard in the exercise of his discretion, most certainly includes misconduct by an applicant in the sense that he has departed from declared intentions. This clearly means that a licence renewal may be refused specifically because the applicant has not done the sort of work which he said he intended to do. The Tribunal says that it was only because of the "great general importance of the matter" that it consented to deal with the Knight case on its merits, since it was indistinguishable in principle from Williams, but there is no doubt that its decision will now cause great alarm among those who are disposed to lump this problem of renewal in with similar issues raised by, firstly, section 9(4) of the 1953 Transport Act, which is now beginning to cast its sinister shadow, and, secondly, the forthcoming renewal of special A-licences, for which there has never been any normal user.

### Fresh Application Insisted Upon

SECTION 9(4) prescribes that, since the passing of the 1953 Act, any false statement by an applicant, whether to his knowledge or otherwise, or any statement of intention or expectation which has not been fulfilled, shall be an added ground for the suspension or revocation for an A- or B-licence during its currency. It now appears that licensing authorities are to apply the same tests, using section 6(2), to all applications, which of course include what are loosely termed "renewals." The noose is tightening around the necks of smaller hauliers who in previous applications have been obliged to specify a restricted user and who are now in mortal danger if they have substantially changed their operations. It is important to bear in mind here that the 1933 Act nowhere empowers a licensing authority to attach conditions to an A-licence; it is the licence holder who states how, if at all, he proposes to limit his activities. In the past, it has often been sufficient at renewal time for an operator who has changed the nature of his business to prove need for the new facilities; now, however, if he departs from the promises he has made, self-imposed conditions as it were, he is in peril of section 9(4) throughout the currency of his licence and of section 6(2) at renewal. The Road Haulage Association, which is actively considering all three points mentioned, would like to head off any wholesale onslaught on changed user by a kind of gentlemen's agreement. It suggests that a haulier should cover himself by notifying the licensing authority immediately there is a substantial change in his business and that the authority should merely note this and leave the matter to rest until renewal time. The Tribunal insists that he can regularise his position only by applying for a new licence to cover the new facilities and offering to surrender the old licence.

### Blizzard be Blowed

THE great snowstorm which suddenly hit Britain, particularly in the north and east on February 24 and 25, brought many urgent problems to the London Midland Region of British Railways and called for great efforts on the part of the staff. On the night of February 24 the overnight trains to and from London and Scotland were arriving at destinations so late that the turnround of stock for the next journey could not be accomplished. The six Tuesday night sleeping trains from Euston to Scotland were therefore amalgamated into three trains. Meanwhile the storm seriously interfered with intermediate and local services in the North and Midlands. Snow and blizzard conditions were not the only causes of delay. Telegraph lines were down, thus destroying communications; trees and poles were strewn across the lines and the wind piled up blockages of snow at various points. There was a complete disruption of communications for signalling and control purposes between Warrington and Wigan and a general disruption of communications on the Western Division north of Warrington. Blockages of the main lines occurred between Manchester Central and Derby, between Manchester and Sheffield via Chinley and between Manchester and Sheffeld via Woodhead Tunnel. The work of clearance and restoration was carried on continuously from the time the snowfalls occurred until late on February 26 in some cases; during this period the staff were working in difficult conditions with drifting continuing to occur. At Blackrod 60 men from Blackburn and Wigan with a snowplough grappled with the task of digging out a train which was stuck in a drift. The job occupied 12 hr. Snowploughs worked for 17 hr. to clear the line from Buxton to the Parsley Hay and for 18 hr. at Woodhead. The blizzard was indeed a challenge, but its aftermath was greatly reduced by the strenuous endeavours of the staff.

### Rural Transport in Northumberland

THE Northumberland Rural Community Council has completed an inquiry into rural transport problems in an area in mid-Northumberland. This inquiry resulted from a deputation from the North East, led by Lord Ridley, which met the Minister of Transport in 1956. Although it is known that some other areas have the same problems no other similar inquiry is known to have been made. The report has already been submitted to the Ministry of Transport by the Rural Community Council with a plea for immediate action. The inquiry covered only part of Northumberland but conditions in other parts of the county are similar. Attention was centred on bus services since all passenger train services in that particular area had been withdrawn. The picture is clear. Stage services no longer pay. More people are travelling by car so that there are fewer bus passengers. At the same time the costs of operating buses are rising. Nevertheless there is still a very substantial demand for public transport which must be met. Fares cannot be increased sufficiently to cover the losses, nor can the operators make further economies. The small bus operators described in the report at present offer the most economical means of providing public transport. Their position is critical.

### Need for Help Urgent

THE short-term solution to these thorny problems is to grant exemption from fuel tax. This would not solve all the difficulties but would encourage the small operators to preserve something like the present pattern of services. The long-term solution may be found in a system of subsidies. Unless action is taken rural bus services must be expected to collapse within the next few years. In the area of the inquiry there was barely a service which paid its way. Since the inquiry was completed more cuts have been made. The report shows that, assessed merely in terms of cash, the total cost to the community of a countryside without public transport might well be greater than the loss of revenue from the fuel tax. The social effects would be disastrous. An abridged version of the report entitled *Northumberland Country Bus* will shortly be available from the Northumberland Rural Community Council, 26 Trafalgar Street, Newcastle upon Tyne, 1, price 2s. 6d. The Northumberland Rural Community Council was formed in 1951 by the Northumberland County Council and 30 other organisations. The research workers who undertook the investigation of rural transport were Mr. W. R. Snaith, B.Sc. (Econ.), a lecturer at the Municipal College of Commerce, Newcastle upon Tyne, Mr. S. E. Robinson, B.A., a post-graduate student in the Department of Geography, King's College, in the University of Durham, and Mr. D. Mennear, a fourth-year student of Town and Country Planning, King's College. They were assisted by the secretary and staff of the Rural Community Council, and by a subcommittee of which the chairman was Brigadier R. F. Ware, M.C.

### Ministerial Fireworks

PERHAPS Monday of this week will best be remembered by the Minister of Transport as the day on which he demonstrated the truth of the old saying that "what goes up must come down." At the inauguration of work on the Ross spur motor road at Ross-on-Wye he signalled action by the bulldozers by firing a Verey pistol. At the first squeeze of the trigger a click was produced. At the second attempt a green rocket climbed vertically into blue sky, hovered at top dead centre and then decided to come down by the same route. Mr. Watkinson and his entourage of representatives and officials from three counties—Gloucestershire, Herefordshire and Worcestershire—found it necessary to be a little undignified if they were to avoid the ballistic symbol of the motorway era. The 20-mile link between the Midlands and South Wales road systems will cost £6 million and will be completed by 1960. Southward the reconstructed Heads of the Valleys road will connect with Neath, Port Talbot and Swansea.

### The Port of New York Authority

MASSIVE development is due to take place in the area of the Port of New York Authority over the next five years; about 600 million dollars is to be spent on improved land, sea, air and terminal facilities. Twenty-five obsolete piers on the Brooklyn waterfront are being replaced by 10 modern structures and new terminals for the great liner companies have recently been completed or are envisaged on Manhattan itself; Port Newark is being extensively developed. To match these developments the authority is extending its commercial representation abroad. A trade development office has already opened in Zurich and a similar facility is now in being in London at Fountain House in Fenchurch Street. Importers and exporters can here be supplied with information on port facilities and transport services in the New York port area. The constitution of the port authority, founded on a compact of 1921 between the states of New York and New Jersey to promote and protect the commerce of the port, is modelled closely on that of our own Port of London Authority, but not everyone in this country will be aware that, in addition to providing purely marine facilities, the authority administers motor freight, long-distance bus and railway freight terminals, the Lincoln and Holland road tunnels as well as the George Washington and other bridges, and the four largest airports. These at first sight extraneous activities derive from the general duty laid upon the authority to develop and operate terminal and transport facilities in the port district—an area within a 25-mile radius of the Statue of Liberty. Its entire development programmes must, moreover, be carried out without any burden on, or indeed recourse to, the taxpayer. Instead, capital is raised—and without difficulty it seems—from the issue of bonds. Is there any doubt that a similar agency would produce equally satisfactory answers to some of Britain's transport needs?

### Charles Kellam Bird, C.B.E.

IT was sad that ill-health should have compelled Charles Kellam Bird to relinquish railway management; it is tragic that he should have had only four weeks of retirement before his death, which we regret to record on another page. Although he was not well, a letter from his hospital bed full of hope for the future arrived with us only last week. As a railway officer brought up through the mill of traffic apprenticeship in the North Eastern Area of the L.N.E.R. after a brilliant career at Cambridge, his outstanding characteristic was clear insight into the problems of the tasks ahead that manifested itself in the Eastern Region in an early start on regular headway services, electrification extensions, marshalling yard projects and reorganisation to meet the new conditions of competition under the 1953 Act. But always abundantly clear was his warm human sympathy and the high ideals reflected in his memorable address to the Railway Students Association. He will be sadly missed in his capacity as president of the Railway Convalescent Homes, to the dinner of which in May he was looking forward, and in other spheres where he had hoped to continue to serve. His friends will miss the odd mathematical problem (on which he worked years ago for pleasure in his spare time with Charles Hopkins, whose tribute appears on another page), the occasional well-placed and witty Latin tag, the mellifluous and resonant tones of his warm and friendly greeting and his deep philosophy.

## LEADING FEATURES IN THIS ISSUE


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***The Editor is prepared to consider contributions offered for publication in MODERN TRANSPORT, but intending contributors should first study the length and style of articles appearing in the paper and satisfy themselves that the topic with which they propose to deal is relevant to editorial requirements. In controversial subjects relating to all aspects of transport and traffic this newspaper offers a platform for independent comment and debate, its object being to encourage the provision of all forms of transport in the best interests of the community.***

## *London Midland Freight Developments*

DESPITE its enormous volume of passenger traffic, freight is the major preoccupation of the London Midland Region of British Railways. Its 7,700 daily freight trains run 37,082,013 miles a year, or nearly one-third of the total freight train-miles operated in Britain. Last year these freight trains carried 11,927,700 tons of merchandise, 21,748,700 tons of minerals, 45,866,000 tons of coal and coke and 700,000 head of livestock. Introducing the new express freight service timetable, now being distributed to traders, Mr. David Blee, L.M. general manager, said traders wanted efficient service not in 15 years' time, but now; that high standard of service was available to industry at this moment. Indeed, he thought no other form of freight transport could match British Railways for speed on long-distance hauls. Not everyone, however, was aware of the introduction of large numbers of express freight trains, now totalling over 500 and an advance of 60 in the past year. It was for this reason that the London Midland had produced *Principal Express Freight Train Services and Facilities*, a 48-page booklet which gave industrialists reliable information of over 200 of the leading vacuum-braked express freight train services now available, showing departure times and when goods were normally available for delivery. Each successive issue would include more of these fast trains as more vacuum-braked wagons became available. There are also details of special wagons, containers, and facilities ranging from the handling of export traffic and the making of agreed flat rates to use of railhead stores and the hire of sacks. Mr. Blee referred to the reliability of the service, which in four weeks ended January 25, under hard weather conditions, achieved a figure of 61.9 per cent of express and semi-express freight trains on time or less than 30 minutes late. The express freight services are loading to 65 per cent of their capacity and prospects are good.

### *Parcels and Freight Plans*

IN the matter of parcels traffic there was no service to equal the railway's nationwide parcels service by passenger train. The London Midland, said its general manager, ran 1,000 parcels trains each week and some 16 or 17 million bags of mail were handled each year. Plans were well forward to remove parcels and mails traffic from passenger platforms, which would enable them to be dealt with more expeditiously. There was, for example, a scheme at Euston costing half a million pounds. Other big stations would be treated similarly. Progress in the great modernisation plan, new methods, the growing use of vacuum-fitted goods trains and productivity and work study are all contributing to faster freight movement. Were it not for the necessity to transfer road collections to railway wagons, the speed factor would be even more impressive. To improve the results considerable numbers of containers are being built to increase the British Railways stock of 40,000, the largest in Europe, which is already some 8,000 more than two years ago. These containers, aptly called "the suitcases of commerce," are of types well suited to varying types of traffic and are daily growing in popularity with traders. Research is going on to achieve lower tare weights, higher pay loads and new loading and securing techniques. Another development to accelerate the work of transferring road collections to railway wagons is the now completed mechanisation of cartage. At the end of 1957 the fleet of the L.M. Region was 5,745 tractor units and 11,794 trailers. These vehicles vary in capacity from 10 cwt. parcel vans to 15-ton tractors, but articulated vehicles predominate. Following the railhead principle, the vehicles are based at 250 goods and 170 passenger stations. During 1957 they conveyed 8¾ million tons of goods traffic and over 63 million parcels; they traversed a distance of 33 million miles.

### *Concentration of Traffics*

THERE will be concentration of sundries traffic at a number of freight terminals. Liverpool, Birmingham, Manchester, Watford and Stoke are some of the points at which steps towards this end have already been taken. Some present terminals at other points will then be unnecessary. The sum of £350,000 is being spent in 1958 on new cranes at goods depots. Projects are in hand to build new marshalling yards at Carlisle (replacing eight old yards) and Swanbourne. The last-mentioned, together with a new flyover junction at Bletchley, will greatly reduce the amount of traffic passing through the congested London junctions by developing a ring route via Cambridge, Oxford, Reading and Redhill, giving direct connections between all parts of the country. Each yard will cost £4½ million. The rapidly increasing number of freight vehicles now being equipped with vacuum brakes requires maintenance and repair depots and a programme has been launched for the construction of ten. Work has already begun on one at Chester. Electrification is taking shape; electric trains will be running between Crewe and Manchester by September, 1960, and between Crewe and Liverpool by September, 1961. Meantime orders have been placed for large numbers of diesel-electric locomotives to be used pending the complete electrification of the London Midland Region; a number of these has already been placed in service.

### *Colour Light Signalling*

NEW four-aspect colour-light signalling is now being installed as quickly as possible on the London Midland; it will enable express freight trains to follow each other at their maximum speed at four-minute intervals. The control of long sections of main line will be concentrated on a few strategically placed power signalboxes. All this will give increased line capacity and a freer flow of traffic. Freight trains will thereafter no longer have to be pushed aside in sidings and loops to make way for passenger trains. The Euston—Crewe—Carlisle line is already covered by colour-light distant signals and full colour-lights are operating at Carlisle, Liverpool, Manchester and between Stockport and Levenshulme, and at such centres as Crewe, Rugby and Euston. Claiming that British Railways were unsurpassed for speed in express freight and parcels services, Mr. David Blee mentioned that neither air nor road could equal the railway's handling of the newspaper business. As an example he quoted the *Radio Times*. Into eight million homes the journal goes promptly every week; it is sent by rail. No other agency could tackle this problem, nor the coal problem, nor the ores from the ports to the blast furnaces, nor the morning post. "I could quote many other traffics," said Mr. Blee. "Facts such as these surely make farcical the recent suggestion that the railways are a back number and should be abandoned to roads."

## *Forthcoming Events*

**March 10.**—Institute of Transport. Paper by Mr. D. M. Sinclair, "Relations in Industry." At 66 Portland Place, W.1. 5.45 p.m.
Road Haulage Association (Metropolitan and S.E.) Annual banquet and ball. At Grosvenor House, Park Lane, W.1. 6.45 p.m.
Institute of Road Transport Engineers (East Regional). Paper by Mr. J. N. Morris, "Petrol Injection." At Houldsworth Hall, 90 Deansgate, Manchester. 7.30 p.m.

**March 11.**—Institute of Transport (Midland). Paper by Mr. N. W. Rolfe, "Road Passenger Transport in the United States and Canada." At Exchange and Engineering Centre, Stephenson Place, Birmingham. 6.30 p.m.
Institute of Transport (North Staffs). Annual general meeting At Grand Hotel, Hanley. 6.30 p.m.
Institute of Transport (West Middlesex). Paper by Mr. W. Woodruff, "Air Traffic Control at London Airport." At Control Tower Building, London Airport. 6.15 p.m.
Institute of Transport (Yorkshire). Paper by Mr. A. A. Harrison, "The Price of Freight by Railway." At Great Northern Hotel, Leeds. 6.30 p.m.
Institution of Mechanical Engineers (Automobile). Paper by Mr. G. Grime, "The Inspection of Vehicles for Roadworthiness." At 1 Birdcage Walk, S.W.1. 6 p.m.
Institution of Civil Engineers. Films by Dr. H. R. Lillie, "The Conservation of Natural Resources." At Great George Street, S.W.1. 5.30 p.m.

**March 11-12.**—Society of the Chemical Industry (Corrosion). Symposium on "The Protection of Motor Vehicles from Corrosion." At Institution of Mechanical Engineers, 1 Birdcage Walk, S.W.1. 9.30 a.m.

**March 12.**—Institute of Transport (Southern). Paper by Mr. T. A. Bushell. "Progress at Sea, 1839-1958." At Harbour Board Offices, Southampton. 5.45 p.m.
Railway Students Association. Paper by Mr. T. M. Herbert, "Railway Research." At London School of Economics, Houghton Street, W.C.2. 6.15 p.m.
Institution of Railway Signal Engineers. Paper by Dr. A. Rosen, "Interference in Lineside Cable Circuits from 25 kV 50 c/s Traction Systems." At Institution of Electrical Engineers, Savoy Place, W.C.2. 6 p.m.

**March 13.**—Institute of Transport (East Midlands). Paper by Mr. M. A. Cameron, "Non-paying Services—the Public's View." At Franklins Gardens Hotel, Northampton. 1 p.m.
Institution of Highway Engineers (Midland). Annual general meeting and dinner. At Wolverhampton.
South Wales and Mon Railways and Docks Lecture and Debating Society. Joint meeting with Institute of Transport (South Wales and Mon). Paper by Mr. R. L. Charlesworth, "A New Spirit on British Railways." At Dock Manager's Office, Adelaide Street, Swansea. 6.45 p.m.

**March 14.**—Institute of Transport (Southern). Annual dinner and visit of president. At Grand Hotel, Lyndhurst. 7.15 p.m. for 7.45 p.m.
Institute of Highway Engineers (North West). Annual general meeting and dinner. At Engineers' Club, Manchester. 6 p.m.

# HOTELS AND CATERING

## *British Transport Commission Activities*

### A LIVELY AND ATTRACTIVE POLICY

QUIETLY and without fuss—in fact all too little noticed by the public in general—a revolution has taken place in the services and methods of the catering and hotel facilities associated with the railway transport services in Great Britain. Some developments had certainly taken place on all the main-line railways before the war, but it would not have been an unfair generalisation to say that the majority of refreshment rooms and hotels reflected in their decor and in many of the services provided the taste of a bygone age. The railway refreshment room became notorious—at least as a standby for music hall jokes—as being somewhat behind the times; many of the hotels, despite notable exceptions where modernisation or reconstruction had taken place, were redolent of the Victorian age and no longer corresponded precisely to what was expected by the 20th century patron, whether a wealthy traveller or a representative of trade and industry.

#### Meeting Public Taste

All this has been changed, or where the change has not yet taken place, there is no lack of plans for improvement. It is one of the triumphs of our nationalised transport system that so many hotel premises and railway refreshment rooms should have been modernised so skilfully as to evoke an encouraging response from the classes of customer to whom they are intended to appeal. Furthermore, the catering service on trains has been greatly modified both to provide good meals and the type of surroundings best suited to accord with present-day requirements. The public taste has changed considerably in the past two decades since the norm of prewar, and it is greatly to the credit of the British Transport Hotels and Catering Services that the services provided and the equipment with which they are provided accord so closely with contemporary wishes.

Each of the four main-line railways had a department dealing with hotels, refreshment rooms and meal services on trains, although the Southern Railway differed from the majority in view of the large number of facilities let out to contractors. The organisational methods differed considerably and when the British Transport Commission took over the railways on January 1, 1948, it was decided to delegate the work of these sections of the business to an Hotels Executive, which took over shortly afterwards, on July 1, under the chairmanship of Lord Inman and with one full-time member in Mr. F. G. Hole, previously chief hotels superintendent of the London Midland and Scottish Railway. There were also three part-time members. Subsequently this arrangement was modified and under the chairmanship of Sir Harry Methven, Mr. F. G. Hole and Mrs. E. H. Gasking were full-time members.

#### Unifying Methods

A considerable task of unification of practice had to be carried out to weld the hotel and catering departments of the former companies together and to embody the best of the systems employed by each of them. The primary matters to which attention was given were to keep the business going with proper standards of service and accommodation; and then to plan the necessary nationwide managerial and administrative organisation, the appointment of the necessary officers and the establishment of the appropriate offices for an efficient administration.

As indicated, the procedure was to put first things first and to ensure as far as was humanly possible the establishment and maintenance of goodwill and maximum patronage. To this end the process of rehabilitation after the excessive wear and tear of the war years was actively pursued and the most urgent arrears of maintenance were immediately tackled. A good deal of work was got through under this organisation.

#### Reorganisation

When the Government remoulded the organisation of the British Transport Commission under the Transport Act, 1953, it was decided to abolish all the Executives except London Transport as from September 30, 1953, and the business of the Hotels Executive was transferred to a division of the B.T.C. under the title of British Transport Hotels and Catering Services, with Mr. F. G. Hole as its chief. Under the present set-up, Mr. Hole is general manager, Mr. A. R. d'A. Mount is his assistant, Mr. E. J. Vacher is chief hotels manager, and Mr. E. K. Portman-Dixon is in charge of the restaurant cars and refreshment rooms.

The postwar decor in bars at British Transport hotels: the Aperitif Bar at Charing Cross Hotel, London; the American Bar in the Turnberry Hotel; and, right, the Cocktail Bar in the Beaufort Restaurant, Great Eastern Hotel, Liverpool Street

The Harewood Restaurant in the Queens Hotel, Leeds, and, right, the French Restaurant in the Midland Hotel at Manchester

An important feature of the organisation is the provision of regional catering officers who make close contact with the special requirements of each of the six regions of British Railways. The division is today responsible for 36 hotels, roundly 350 refreshment rooms and about 700 daily restaurant and buffet car services.

Dramatic changes have been made in the appearance of some of the hotels, even with unpromising material. For example, although at Charing Cross Hotel, London, the reconstruction of war damage on the upper floors involved rebuilding to a mid-Victorian outward appearance, the premises have been altered internally so that from the very moment of passing through the entrance hall the user looks the length of an attractive vista terminating in an illuminated apse containing flowers and is thus invited to proceed to the restaurant, which necessarily in this railway terminal building has to be on the first floor, and to the other accommodation.

#### Charing Cross Improvements

Major repairs to the kitchens had to be done in this hotel and the opportunity was taken to introduce central heating and to provide additional bedrooms and bathrooms in accordance with present-day demand. The entrance was greatly improved by the provision of a new basement cloakroom near to the hall and by the removal of the connection to the circulating area of the station. The skilful redecoration has made the colour and cleaning of the original decorated marble pillars blend with the old gold, rose and red velvet coverings on the French period chairs. The carpet is in a pink, green and beige Adam design and the curtains are juniper green lined with pink. A new wine dispense has been incorporated in the service layout to facilitate easier working, the space vacated by the old unit being converted into a small writing-room and cloakroom for guests using the restaurant.

The residents' lounge has been converted into an aperitif bar which is panelled in pearwood. The appearance of the room has been enhanced by the introduction of red leather lambrequins which blend with the grey and green leather covered chairs and banquettes. In contrast the carpet is patterned in mustard and brown, whilst the bar is faced with brass studded leather in shades of grey, green and red. The lighting is by wall brackets with flame-coloured shades and concealed lighting has been installed in the centre dome of the room. A new false ceiling conceals the air extraction plant and refrigerated shelves are fitted in the bar service.

#### Widespread Schemes

Among other improvements carried out at Charing Cross is the forming of a mezzanine over part of the main kitchen, so providing additional space to accommodate staff amenities and stores in the station refreshment room. The kitchen has been provided with improved refrigeration, a meat preparation room and an office for the chef. Still further progress will stem from the building of an entrance from The Arches; improvements to the floor services; the remodelling of the ground floor American Bar; yet more private bathrooms will be added.

Similar details could be recited in the case of a very large number of the British Transport Commission's hotel properties and particularly pleasing schemes which have appealed to us include those at the North British Hotel in Edinburgh and in the bar of Turnberry Hotel in Ayrshire.

#### Clearing the Ground

When the Hotels Executive took over the properties from the prenationalisation railway organisations there were five hotels still closed after either damage during the war or occupation by the military and the first task was to rehabilitate and reopen the Station Hotel at Aberdeen; Turnberry Hotel and golf courses, Ayrshire; Great Northern Hotel, Peterborough; Zetland Hotel, Saltburn; and Dornoch Hotel, Sutherland. On the other hand, in pursuance of a policy of eliminating establishments which were either unremunerative or had outlived their original purpose the building of the Station Hotel, Holyhead, was transferred to British Railways for railway purposes, the Fishguard Bay Hotel, Fishguard, was closed and a bakers' dozen of others were sold. These include Station Hotel, Ayr; Great Northern Victoria Hotel, Bradford; Crewe Arms Hotel, Crewe; Cruden Bay Hotel, Cruden Bay; Felix Hotel, Felixstowe; the Yarborough and Royal Hotels, Grimsby; Sandringham Hotel, Hunstanton; Great Northern Hotel, Leeds; Midland Hotel, Morecambe; Park Hotel, Preston; Knowle Hotel, Sidmouth; and the North Stafford Hotel, Stoke-on-Trent.

It was found that at no fewer than six hotels besides Charing Cross—the Royal Station at Hull; the North British at Glasgow; Great Northern, London; Grand, West Hartlepool; the Royal Station at Newcastle upon Tyne; and the Royal Station at York—central heating had to be installed. Boilers had to be renewed at York, Newcastle, and at the Great Eastern Hotel, London, while conversions to oil fuel were carried out at the Adelphi and Exchange Hotels, Liverpool; Queens Hotel, Birmingham; and Station Hotel, Aberdeen, thereby adding to comfort and cleanliness as well as promoting economical operation of the heating installation.

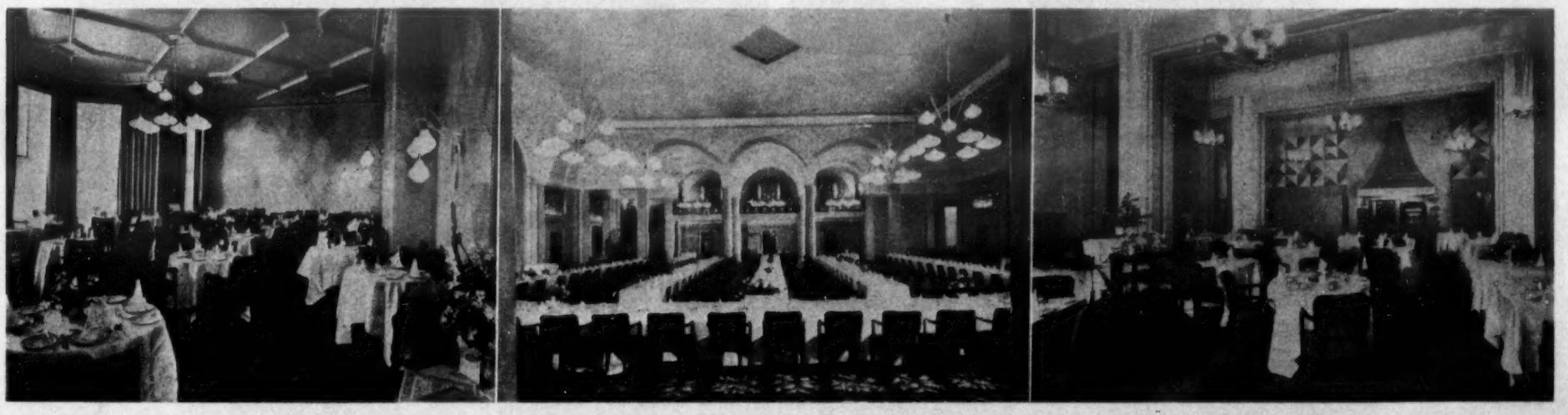
#### Metamorphosis

The story of what has gone on to metamorphose the chain of British Transport Hotels into first-class properties is the summation of many minor measures. Only in the case of the Royal Station Hotel, Newcastle upon Tyne, has the step of entire rebuilding been seriously considered.

Some of the work that has been accomplished includes the restoration of the French Restaurant and foyer, Trafford Restaurant and the grillroom at the Midland at Manchester, where the lounge has been attractively renovated and modernised at the same time. The Wyvern Room is a notable addition; the American Bar was altered to make it larger and more attractive; and finally a fundamental modernisation took place in the kitchens, the heart of a good hotel, where replanning was carried out before they were re-equipped.

The Adelphi at Liverpool suffered war damage and had to have rehabilitation work and window renewal carried out. The banqueting suite and Sefton Grillroom are about to be the subjects of treatment. New lifts were also provided. The Exchange in Liverpool also required restoration after war damage; opportunity was taken to provide a new American bar. The Caledonian in Edinburgh suffered no bomb damage but was run down at the time of nationalisation through excessive peaks of wartime business. The Pompadour restaurant was brought into service again and a new American bar was provided as soon as work could be put in hand. As already mentioned, extensive modernisation of the interior of the North British Hotel, at the other end of Princes Street, has taken place and great importance has

(*Continued on page* 6)



Various types of meal facilities in British Transport hotels: Dining-room in the Welcombe Hotel, Stratford-upon-Avon; the Banqueting Hall of the Queens Hotel, Leeds; and, right, the Grill Room of the Midland Hotel at Manchester

## LORRY—BUS—COACH

# Drivers' Agency Owner Acquitted

AN attempt in a test case by the Scottish area Licensing Authority to secure the conviction of a drivers' agency proprietor for using a goods vehicle for hire or reward without a carrier's licence failed at Perth Sheriff Court on Monday this week. Allan Forrest Burnett, representing the Burnett Labour Agency, pleaded not guilty and was acquitted on a charge that on behalf of the firm he used a goods vehicle for the carriage of goods for hire or reward without being the holder of a carrier's licence. Sheriff-substitute A. M. Prain said that a lorry was loaded with tractors from Coventry to Arbroath. The tractors belonged to an Arbroath engineering firm, which had hired the lorry under its C-hiring allowance from Mr. David Lawson, a haulage contractor in Kirriemuir. The driver was supplied by the agency.

The general purpose of the carrier's licence, said the sheriff, was to regulate the carriage of goods by goods vehicles. The defendant might be considered to be the user of the vehicle, but the idea that such a licence should be required by one who, on the face of it, neither operated any vehicles nor was concerned with any of the goods being carried was, to say the least of it, an artificial conception. An appeal is being considered.

### Pension Schemes Compared

PENSIONS under the Road Haulage Association scheme provide benefits as good as those for B.R.S. employees, and in fact they are at practically every point superior, it is claimed in an article appearing in the March issue of the *Road Way*. Mr. R. N. Ingram, a vice-chairman, says the schemes have been devised by different methods and to meet different conditions. The significant point, he says, is that here is one of many things concerning which the critics are inclined to state, without proof, that B.R.S. can do something for its workers that is not even possible for the majority of independent operators. "In fairness, it must be added that, whereas the B.R.S. scheme naturally applies to all employees, there are many hauliers not yet providing pensions for their staff." It is also fair to add that some drivers are not interested in participating in a pension scheme and since the R.H.A. scheme is a voluntary one there is nothing which can be done about this.

### Sussex Independent Appeal Rejected

ON an appeal by Mr. B. S. Williams against the decision of the South Eastern area Traffic Commissioners refusing him a road service licence in respect of excursions and tours starting from Stedham, near Midhurst, Sussex, the Minister of Transport has decided to make no order on the Traffic Commissioners. He agrees with the inspector (Sir Maurice Holmes) that it would have been open to the Commissioners to grant a licence to Mr. Williams during the currency of an existing licence held by Mr. W. A. Potter, but that the refusal of the licence was justified on the ground that any and all applications that might be made to run this service of excursions and tours should be considered together on their merits. The Minister expresses no view on the merits of the case which will fall to be determined upon consideration of the subsequent applications made. Mr. Williams took over the stage services of Mr. Potter in 1947 and now submitted that the latter was not running his remaining excursions and tours from Stedham to the permitted extent.

### Fined for Driver's Waywardness

CHARGED with having deviated from the authorised route on a works service, Rubery to Adderley Park in Birmingham, Cecil Frank Costello, trading as Radley Motors, of Marston Green, was fined £3 in Birmingham. The coach driver was alleged to have said that he deviated on his own initiative because the authorised route, on which there was traffic congestion, caused late arrivals at the works, at which there had been complaints. Defending counsel said it was a human temptation to deviate in order to drop passengers at or near their homes.

**An unwieldy load of tubes carried on a special Taskers trestle semi-trailer hauled by an E.R.F. tractor; right, Derby power station receives pulverised fuel at a bunker feed from a Seddon Mark 14 maximum-load 4-wheeler with Pilot tipping gear**

### Charter for Car Delivery Drivers

MONTHS of negotiation between the T. and G.W.U. and Coventry firms engaged in the delivery of new cars have resulted in an agreement on drivers' wages and conditions. This, the union says, is a landmark in the history of the Coventry delivery drivers as it is one of those industries which prior to the agreement was notorious for very bad conditions—no guaranteed rates, no holiday pay, no overtime payments. Men were rising at 3 a.m. and working to 10 p.m. each day of the week in order to secure a reasonable wage. The new agreement represents a major improvement in that it substantially increases the trip rates (previously about 30s. per trip), provides holiday pay, a guaranteed week and extra payment for Sunday work; it also provides for the recognition of union shop stewards at each depot. A similar agreement is to be pressed for from Birmingham manufacturers. Outside drivers who collect cars are not covered.

### Regenerative Braking System

AMONG the projects which are being sponsored by the National Research Development Corporation is a system of regenerative braking for motor vehicles. Its annual report for 1956-57, published this week, refers to a prototype installation for a Midland 'Red' double-deck bus and says that after a detailed programme of tests with a full-scale unit the prototype is in an advanced stage of design. In this regenerative mechanical transmission energy otherwise dissipated at the brake drums is stored so as to be available for accelerating the vehicles. Considerable fuel economy is thereby anticipated. Energy created during the braking process is used to motor a flywheel about 2 ft. in diameter and weighing 210 lb.; this in turn functions as an auxiliary source of power during subsequent acceleration. The inventor is Mr. R. C. Clerk.

### Fuel Tax Hits Cost of Living

A GESTURE from the Government, on the lines of abolition or a material reduction in the rate of fuel tax, would contribute to a reduction in the cost of living in this country and would be of direct benefit to the present economic situation, emphasised Mr. T. Robert Williams, chairman of the North Western Road Car Co., Limited, when he presented 25 years' service awards to 30 employees at a dinner in Stockport.

### Colombo Board Has Hands Full

THE chairman of the Ceylon Transport Board has informed the Minister of Transport that the board "has its hands full" and does not wish to take over the tramways and trolleybus services operated by Colombo Municipal Council, as requested by the Special Commissioner, Mr. B. A. Jayasinghe. Mr. Vere de Mel says: "The board has its hands full with the immediate problems of reorganising the bus services, making good the shortage of vehicles and adjusting the personnel problem of 15,000 workers, and it would not be ready to take over additional work until these matters are settled." Colombo Municipality wants to get rid of its "headache No. 1"—trams and trolleybuses—by June this year. It cannot afford to lose Rs.3 million a year on these services. Mr. B. A. Jayasinghe, the Special Commissioner, recently appealed to the Transport Minister: "You take over or we close down our services in June."

### Map of Normal User Demanded

DUPLICATE maps of the quarter-inch Ordnance Survey type or equivalent must in future be supplied with A-licence applications, Mr. J. A. T. Hanlon, Northern area Licensing Authority, announces. Specific places must be mentioned within radii of 50 miles or thereabouts. He said that the measure was being introduced to help the work of his area; it was not a decision taken at national level.

### New Application in Changed User Case?

WHILE an appeal is being lodged by R. Yule and Sons, of Dyce, Aberdeen, against the revocation of an A-licence for alleged breach of the normal user declaration (MODERN TRANSPORT last week) it is expected that the firm will first make a new application for an A-licence with a different user to that previously specified. Hearing of the appeal would be deferred until the outcome of this application was known.

### Tour Operators in Eire

PERMISSION has been granted by the Department of Industry and Commerce in Eire to the following British coach tour operators for weekly inclusive tours: Sheffield United Tours, Limited, Whittaker's Tours, Limited (Rochdale), Northern General Transport Co., Limited, Southdown Motor Services, Limited, South Midland Motor Services, Limited, and Maidstone and District Motor Services, Limited. Tours will include a minimum four-night stay in Ireland.

### Bus and Coach Developments

James S. Simpson, Rosehearty, applies for the licences of J. Kindness, Macduff.

Offices of the West Midland area Traffic Commissioners and Licensing Authority are to be moved on April 14 from York House to Five Ways House, Islington Row, Birmingham, 15.

Chiltern Queens, Limited, applies for a Didcot—The Wittenhams—Wallingford—Stadhampton service, on which Warborough—Stadhampton section would be worked only on Fridays. The licence for an Abingdon (R.A.F. Station)—Stadhampton service would be surrendered.

Birmingham Corporation is proposing a Martineau Street (day) or Bull Street (night)—Great Barr (Scotts Arms) service to replace the Midland Red route 119 operated between these points. B.M.M.O. would also reduce the frequency of its Birmingham—Walsall service (118) and raise all fares between Birmingham and Great Barr.

Maidstone and District Motor Services, Limited, proposes considerable revision of services in the Tunbridge Wells area. A new route between Central Station and Sherwood Estate via Grosvenor Bridge and Oak Road would replace the Rusthall—Oak Road Estate service. Service 91 (East Grinstead—Tunbridge Wells—Pembury) would be diverted at Tunbridge Wells to run to Tonbridge Station and in Tonbridge the local services would be rearranged to operate Dowgates Close—Higham Wood Estate (100) and Barden Park—Cage Green (77). The Trench Road Estate section of 100 would be covered by extending the Tunbridge Wells—Tonbridge (Cage Green) service (98).

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*MODERN AIRWAYS and COMMERCIAL AVIATION SECTION*

# SPEED IN TRANSPORT

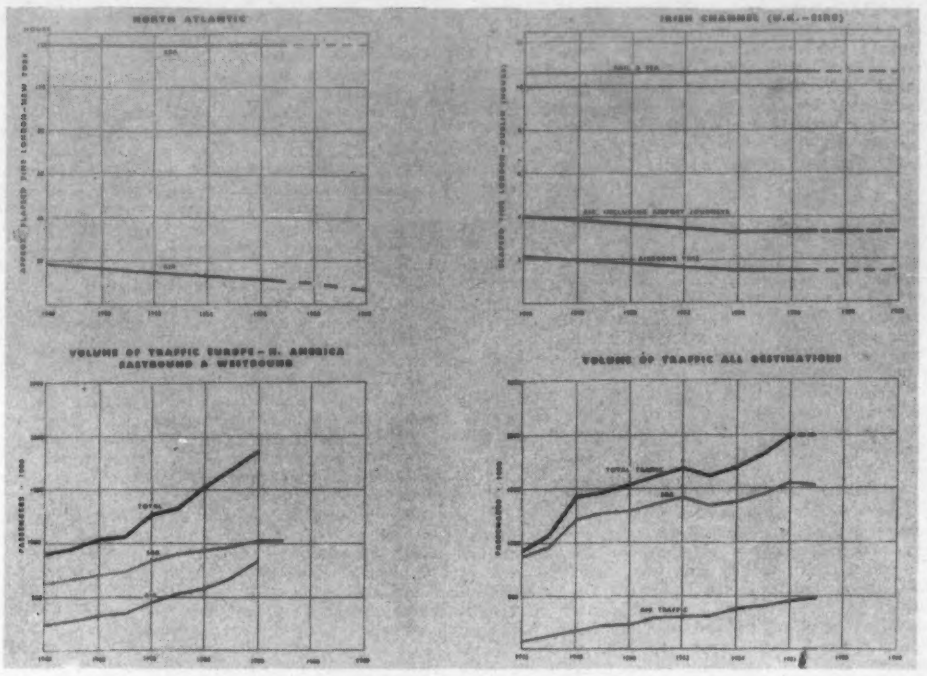
## *The Creation of Demand*

*By Sir GEORGE EDWARDS, C.B.E., B.Sc., F.R.Ae.S.**

ALTHOUGH it has been said before, I am going to try to show the way in which speed in transport has developed and the way that the demand for more and faster transport was stimulated by the world's communities becoming industrialised. Also that, in the same way, and in a kind of chicken and egg relationship, the presence of more and faster transport enabled the world's communities to become industrialised and to expand.

In Britain at the end of the 17th century, the pedestrian in 12 hours (a days' journey time) could have gone 20 miles. The horse-rider, we have established, was able to do 40 miles in his day, which got him on the one hand as far as Reading or in the other direction a little beyond Maidstone. If you were rich, or alternatively ran an expense account, you could travel in the coach and do 75 miles in the 12-hr. day. A hundred years after the end of the 18th century, a 12-hr. journey covered pretty well the whole of Britain and also went into the Channel countries. Here in a day the distance had jumped, from the 75 miles to 250 miles where water was in the way, and to as much as 550 where it wasn't So that from the year dot until the age of the Industrial Revolution, 75 miles was as much as could be managed in a day. Stimulus of the Industrial Revolution during the 19th century produced an increase in the day's journey distance from that 75 miles to over 500. In 1920 the distances that you could go in a 12-hr. journey from London was only 560 miles, no further than you could go in 1895. This is a reflection of the fact that surface transport had not done much between 1895 and 1920 and air travel, of course, had barely started. The next year chosen (1930) shows the 12-hr. distance up to 760 miles, the 1940 one is up to 1,250 (by which time we were covering a large part of Europe)—and by 1960 in which I have allowed myself the anticipation of the big subsonic jets, plus, perhaps, a touch of optimism, the circle is 5,500 miles.

If we look at the Irish Channel, the upper curve there shows a comparable picture in that a journey by train and boat from London to Dublin takes 10 hr. 28 min. whereas the air route from London to Dublin takes 3 hr. 10 min. (centre to centre), a gain of 7 hr. 18 min. Looking at the lower curve it is clear that the total traffic which has doubled has been helped significantly by the attraction of the air route. This has grown from almost nothing to a quarter of the total travel. So summing up these four diagrams we have the position where by flying on the North Atlantic you cut out nine-tenths of the journey time and on the Irish Channel you cut out two-thirds of it.



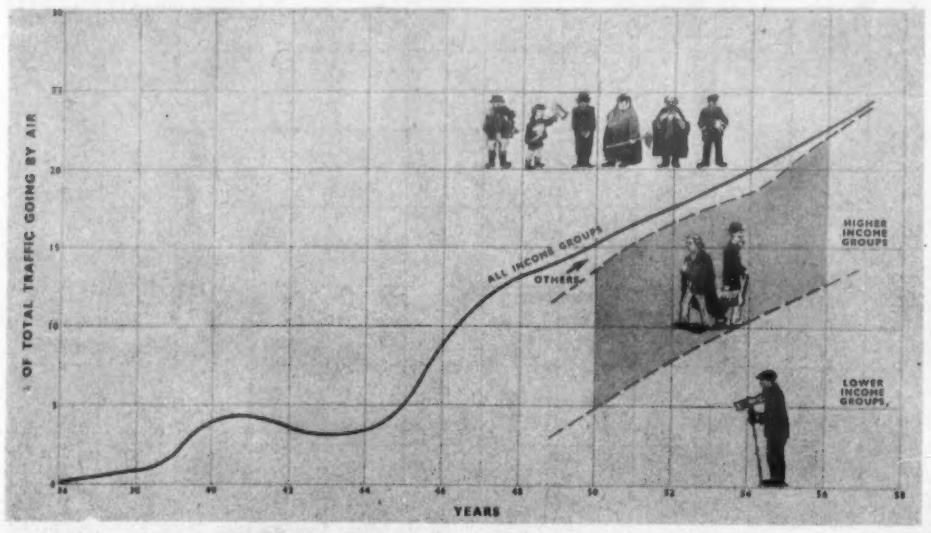

**North Atlantic (left) and Irish Sea routes showing the decrease in journey time of air compared with sea and the proportionate shares of the total traffic**

### Comparison of Air and Sea Traffic

In an accompanying set of graphs two famous routes are examined over the postwar period—on the left is the North Atlantic and on the right the Irish Channel. The upper curve on the left shows how the time to get from London to New York has changed since 1948 with an extension on the air curve to 1960. The big difference between the time that it takes to cross the Atlantic by air and sea is quite clear and needs little comment. The bottom graph shows the way in which the traffic which is carried across the Atlantic is shared between sea and air. In 1957 they carried a little over a million passengers each and the two curves in fact meet. The increase in air over this period is pretty dramatic in that it has virtually quadrupled, but it is also interesting to note that there has been an increase in sea travel at the same time, although not nearly so great. It could be that the upsurge of air travel has had a stimulating effect on this total.

### Encouragement Despite Cost

There is no good talking about speed unless one relates it to cost. Air is not cheaper than sea on either London to New York or Birmingham to Dublin. In actual fact the cheapest form of crossing the Atlantic or going to Ireland is by surface travel. Now bearing in mind that the cheapest way to go to Ireland is by sea, a diagram shows the Irish air traffic subdivided into income groups. The interesting thing here is that the increase over the last seven or eight years has not, as you might expect, come from the higher income groups but has in fact come from the lower income groups. The number of people in the higher income bracket stays fairly constant, whereas the lower income group figure has almost doubled over the last seven years. On the Birmingham—Dublin route the lower income group content is some 70 per cent of the whole. This, I think, is a pretty positive demonstration that speed will encourage travel even though it will cost more, and I think another interesting thing about the Irish route is the fact that it is a short-haul unglamorous leg in comparison with the North Atlantic.




**Subdivision of Irish air traffic into income groups**

What emerges from a general study of business travel is that when a destination gets beyond the 12-hr. journey circle journey incidence falls sharply. There is much business flying inside the 12-hr. circle—in fact half of it. There is a further one-third on journeys of 24 hr. and only one-sixth to the more distant places.

### Importance of Overall Economies

Increasing speed in transport has been the essential handmaiden to increasing development all over the world and the only medium in which speed can continue to increase is the air. There is no indication that a demand for increasing speed is going to diminish or disappear, so that the demand for faster aeroplanes is likely to go on. Having said that, let me make it quite clear that there will be, in my opinion, a whole lot of operations which are better conducted by an aeroplane not necessarily in the top speeed range. The speed range of aeroplanes themselves is, however, scattered over a fairly wide band, but they all have to a greater or lesser degree, a dominating speed advantage over surface transport. People—and I mean people in the mass—are preferring air travel. But—and this is an important point—having chosen to fly, the actual airborne vehicle selected will depend upon overall economies.

(*Continued on page 9*)

* Abstract of the presidential address to the Royal Aeronautical Society on February 26. Sir George is managing director, Vickers-Armstrongs (Aircraft), Limited.

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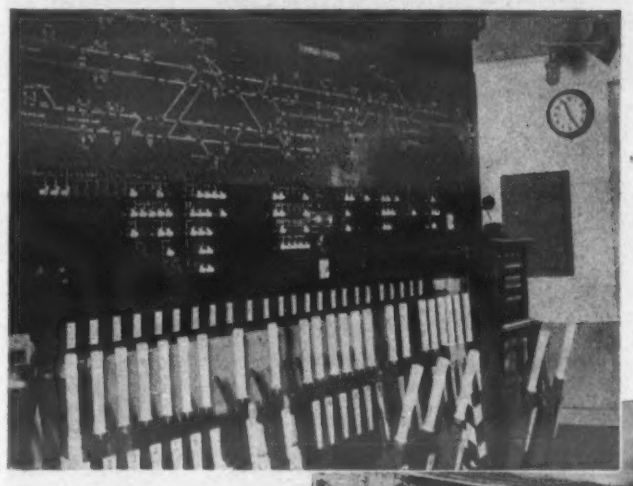


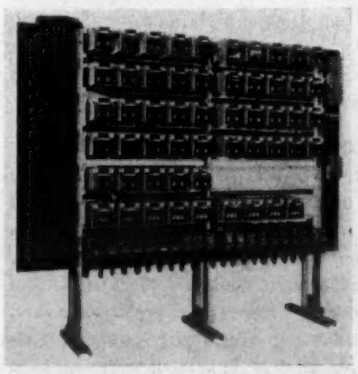
CONTROL PANEL, DUMFRIES STATION

*Photos by courtesy of British Railways, Scottish Region*

RELAY ROOM, DUMFRIES STATION BOX

In this installation recently completed by the Scottish Region, an extensive programme of simplification and rearrangement has been carried out, in which five signal boxes have been replaced by two.

Westinghouse plug-in type relays are installed, and the relay racks, as well as the control panel, were supplied completely prewired.



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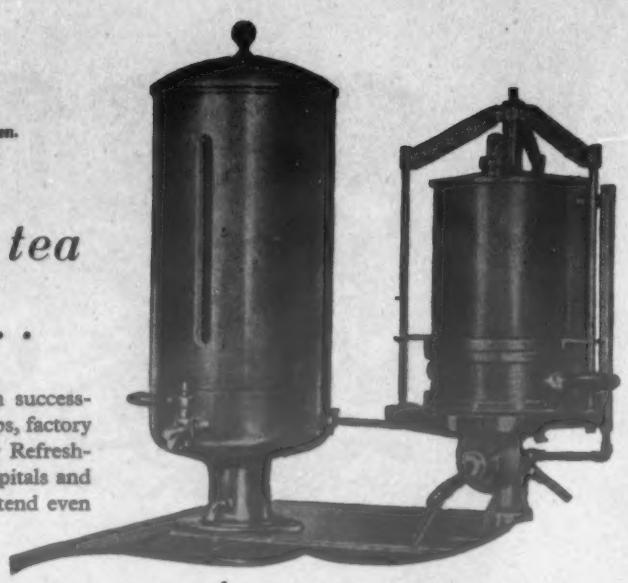

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BRITISH RAILWAYS

## HOTELS AND CATERING

(*Continued from page 3*)

rightly been attached to provision of additional private bathrooms. La Caravelle restaurant is a notable addition to the amenities of the Scottish capital.

**Recherché Meals**

In London rehabilitation of the Abercorn Rooms adjacent to the Great Eastern Hotel has been carried out. The Beaufort is now one of the great assets of the City of London for those seeking a recherché luncheon in a pleasant atmosphere. At the Queens Hotel, Leeds, built by the London Midland and Scottish Railway only 20 years ago, it has been possible to modernise by altering and redecorating the front hall, lounges, French Restaurant and ballroom. Gleneagles, after rehabilitation, has recently acquired a new American bar. Rehabilitation at Queens Hotel, Birmingham, was needed for the bedrooms occupied by the American Y.M.C.A. during the war; war damage had to be repaired; and new private bathrooms have been added.

Addition of the same facility added to the attractions of Euston Hotel, London. Here a typical wartime difficulty left its aftermath. The house for L.M.S. refreshment-room staff was uninhabitable after air-raid damage and for some time they were accommodated on the fourth floor of the Euston Hotel, which had to be refurbished on modern lines when the refreshment-room staff left. Part of St. Enoch Hotel, Glasgow, was similarly occupied by Admiralty staff and restoration was equally needful. New lifts were installed and a former dining-room was adapted to provide for banqueting business. At the North British Hotel in the same city, kitchen alterations and modernisation of the layout and decor of staircases and corridors took place. The Central at Glasgow is another hotel where bathrooms are being modernised and public rooms extended. A new ballroom and renovated kitchen premises were provided at the Station Hotel, Perth.

Two other Scottish projects are the modernisation and remodelling of Station Hotel, Inverness, and provision of an enlarged dining-room and new ballroom at the Station Hotel, Aberdeen.

**Standards of High Quality**

As will be appreciated from the foregoing, a great deal of urgent work necessary to re-establish the revenue-earning potential of the hotels has been completed. In addition, an overhaul of equipment of all kinds, involving the withdrawal and replacement of unsuitable and makeshift articles, entailed by wartime shortages, has been carried out. Standards for high-quality linen, glass, china, cutlery and other items have been laid down.

It is not unreasonable to claim that all this work has not only taken time and effort but has done much to enhance the goodwill of the Division and

(*Continued at foot of next column*)

## SOUTH-EAST LONDON RAIL SERVICES

### M.P.s Meet Southern Region

THE railway situation in the County of Kent was on February 27 discussed at a meeting to which Conservative Members of Parliament invited representatives of the Southern Area Board and the Southern Region of British Railways. The M.P.s were Mr. W. F. Deedes (Ashford), Mr. J. S. W. Arbuthnot (Dover), Sir Alfred Bossom (Maidstone), Mr. F. F. A. Burden (Gillingham), Mr. Philip Goodhart (Beckenham), Right Hon. Edward Heath (Bexley), Mr. Richard Hornby (Tonbridge), Mr. Peter Kirk (Gravesend), Brigadier Sir Harry Mackeson (Folkestone and Hythe), Mr. W. R. Rees-Davies (Isle of Thanet), Mr. John Rogers (Sevenoaks), Miss P. Hornsby-Smith (Chislehurst), Mr. Donald Sumner (Orpington), Mr. Leslie Thomas (Canterbury), Major E. McN. Cooper-Key (Hastings), Mr. B. Godman Irvine (Rye) and Hon. Mrs. Evelyn Emmet (East Grinstead). The Southern Region was represented by Sir Philip Warter (chairman of the Southern Area Board), Mr. A. B. B. Valentine (member of the British Transport Commission and of the Southern Area Board) and the general manager, Mr. C. P. Hopkins.

During a full and frank exchange of views about the difficulties of the Eastern Section of the Southern Region, the Members of Parliament were able to satisfy themselves on all fundamental issues, the discussion ranging from railway development past and present to manpower and morale. Sir Philip Warter explained what was planned under the modernisation programme to improve the standard of service and increase line capacity. He informed the Members of Parliament that the main problem facing the Region was how to deal with the uneconomic and unprecedented postwar concentration of business traffic into the morning and evening peak hours. Unless there was a radical change of heart towards staggering of working hours, overcrowding during the business periods was likely to remain, he stated. But for this greater concentration into the peak, the increased capacity provided since prewar days would have been more than enough to match the increase in the population.

Sir Philip said that to throw some further light on the problem of what the future held in store in this connection, a full-scale inquiry into development and population had been arranged. Improved ways of keeping passengers informed about train service alterations and delays were being pressed forward as quickly as possible.

(*Continued from previous column*)

lay the foundations for profitable development in the future. The work in refreshment-rooms and dining-car development is no less important and has been no less productive of goodwill. It will be dealt with subsequently.

# Medical Centre for Southern Region

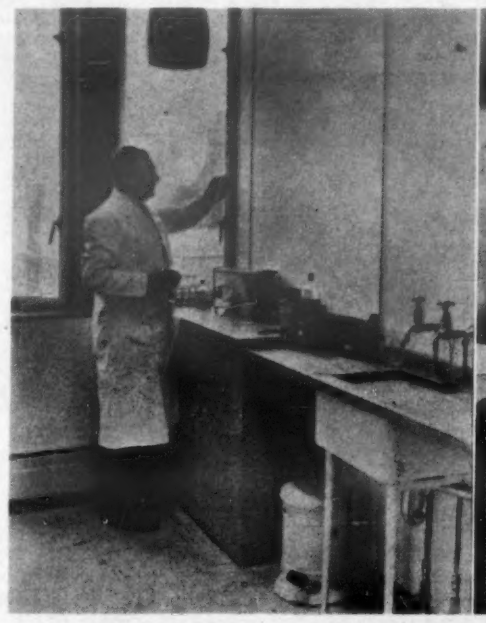
## AT LONDON BRIDGE

FORTUNATE survivor of the Government economy axe is the new Southern Region medical centre at London Bridge. It replaces the rudimentary and archaic facilities which the regional medical officer, Dr. Leonard Haydon, and his team of five doctors have had to use since the prewar premises were destroyed during the air attacks on London in 1940-41.

The opportunity at last to provide a modern centre has been seized imaginatively. The dark green walls and "institutional" furniture, which have depressed thousands of railway entrants, have given place to a subtle colour scheme of pink and blue-grey with light oak panelling and the contemporary look. Dressing-rooms, with illuminated signs showing whether or not they are being used, are attached to each of the six consulting rooms. These are air-conditioned and sound-proofed. Acoustic tile ceilings have been fitted.

There are two eye-testing rooms and a small laboratory. All the rooms are connected by an internal telephone system. There is an absence of any hint of a "clinical" atmosphere. The centre is not to be used for treatment, but for the routine examinations which are one of the principal functions of the headquarters medical staff.

There are entrances to the new centre both from Tooley Street and the station. The former medical department on the floor below had a wash basin and little else. The Southern Area Board and the general manager have taken the view that it was vital to have something better for the staff, many of whom form their first impressions of the railway when they go to Dr. Haydon and his colleagues for their initial medical examination.



**The laboratory at the new Southern Region medical centre, London Bridge, and, right, one of the consulting rooms**

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# NEW FROM KEW

## *Dodge Introduces Forward-Control Range*

FORWARD control and a completely new cab of striking appearance are the two most noticeable features of a new range of 5-7 ton chassis introduced this week by Dodge Brothers (Britain), Limited. There are also important but less apparent changes in the general mechanical features of the chassis. The new range supersedes the manufacturer's semi-forward-control vehicles but supplements the normal-control N series. It is comprehensive and comprises 21 different chassis with nominal payload ratings of 5, 6 and 7 tons. In each group there is a choice of three wheelbase lengths, optional power units and single- or two-speed rear axles.

The short-wheelbase 6- and 7-ton chassis, although intended primarily for tipper work, are also suitable for service as articulated tractors. On this type of work the 6-tonner has a maximum gross combination weight of 29,000 lb., and the 7-tonner is rated at 40,000 lb., when an Eaton 18,500 two-speed rear axle is fitted.

In comparison with the replaced semi-forward-control chassis, the new range embodies important mechanical improvements. Meriting special mention

**Cab interior of the new Dodge forward-control range**

are increased dimensions for the chassis frames, more-heavily constructed front axles, dual-rate front and rear springs embodying half-wrapped eyes and a thicker main leaf and a more powerful braking system for 5-6 ton versions. Power-assisted steering is a standard fitment on 7-tonners and optional on all other diesel-engined chassis. Throughout the series the clutch is hydraulically operated and a 351 cu. in. direct-injection diesel engine is now one of the two diesel power units offered in the 7-ton chassis.

### Increased G.V.W. Ratings

The stronger build of the chassis has made it possible to increase gross vehicle weight ratings, which are now 26,000 lb. for the 7-ton, 22,000 lb. for the 6-ton and 19,250 lb. for the 5-ton vehicles. The manufacturer emphasises that the weights quoted are the maximum permissible under favourable operating conditions and, in the case of 5-6 ton chassis, necessitate the fitting of optional tyre equipment.

Factory-built bodywork for the new range includes double-dropside bodies with interior lengths of 19 ft. 6 in., 17 ft. 6 in., and 15 ft., according to wheelbase; apart from the tipper-tractor chassis, wheelbase dimensions are 140½ in. and 163 in. for 5-6 tonners and 163½ in. and 178½ in. for 7-tonners. Normal production tippers have either a 5 or 6 cu. yd. body, 10 ft. 6 in. long, and underbody-type hydraulic tipping gear on 113½-in. (5-6 ton) or 116½-in. (7-ton) wheelbase.

The front-end styling for the new Dodge is very modern and of impressive width. A notable feature is the one-piece wrap-round windscreen with 1,512 sq. in. of glazing. Protection for the front end is provided by a heavy-duty bumper attached to the chassis frame sidemembers. The cab itself is of welded all-steel construction formed integrally with a box-section sub-frame, through which it is mounted on four rubber bobbins. The side panels are one-piece pressings, to increase resistance to distortion, as also are the roof and back panels, the back being swaged and of double-skin construction above waist height.

The cab interior is roomy and well appointed, having two 18-in. wide seats with shaped back rests of rubberised hair. The driver's seat is upholstered in foam rubber and has 3½ in. vertical and 5 in. horizontal adjustment. Apart from the wide curved screen, there is also a generous area of glazing in the back and sides. The instrument cluster is positioned for quick scanning and a neat unit on the steering column houses the switch gear for the horn, lights, headlamp dipper and, when fitted, the flashing direction signals. Ventilation is provided by full-drop windows, which incorporate friction-controlled wing vents, and dual flap-type vents in the front lower panel. The engine cowl is insulated against noise and heat.

An electric windscreen wiper with dual blades, two rear-view mirrors, roof light, two large glove boxes and fitted rubber mat with felt underlay are standard fitments. Optional extras include dual heater and fresh-air blower units, flashing direction signals, windscreen washers and radio. The engine cowl is quickly removable for accessibility of those engine parts requiring routine attention and the grille panel and radiator are readily detachable for maintenance work of a more complete nature. The chassis frame front crossmember is bolted to the sidemembers to enable the power unit to be removed without disturbing the cab.

### Choice of Four Power Units

One petrol and three diesel engines form the power units for the new range. A 250.6 cu. in. petrol (Dodge) and 288.6 cu. in. diesel (Perkins P6) engines are available in the 5-ton chassis. Both are six-cylinder units, the petrol engine developing 116 b.h.p. at 3,600 r.p.m. and the diesel engine 83 b.h.p. at 2,400 r.p.m. The respective torque figures are 204 lb./ft. at 1,400 r.p.m. and 201.5 lb./ft. at 1,400 r.p.m. These two power units are also offered in the 6-ton chassis, with the further option of a 340 cu. in. diesel engine (Perkins R6). This has a gross output of 104 b.h.p. at 2,500 r.p.m. and a torque of 240 lb./ft. at 1,625 r.p.m. The 7-ton chassis are powered by either the 340 cu. in. or a 351 cu. in. (Leyland O350) diesel engine. The O350 engine develops 105 b.h.p. at 2,400 r.p.m. and 255 lb./ft. torque at 1,400 r.p.m.

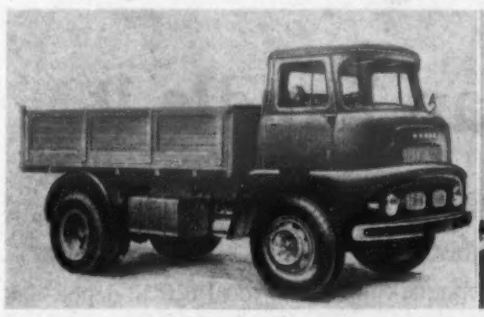
In all diesel-engine installations the engine is flexibly mounted on bonded rubber supports which take up torsional and axial loading. Two rear supports are mounted at an angle to the vertical so as to permit the power unit to oscillate about its natural axis. Top-gear oscillation is absorbed by rubber in shear, while engine vibration due to torque reaction in an indirect gear is controlled by separate rubber buffers. Depending on the engine type, either a single sandwich-type support or two inclined supports carry the engine at the front. The clutch for all models is hydraulically operated. According to which power unit is specified, the clutch is of 11, 12 or 13 in. diameter.

### Transmission

A four-speed gearbox with constant-mesh gears (except first and reverse) is fitted to the 5-tonners and all others have the Dodge five-speed gearbox. This has close-ratio fourth and direct-drive fifth speeds for economical cruising and wider-spaced ratios in the low-speed range to provide adequate pulling ability at peak engine torque. Two power take-off facings are provided. The drive is continued through tubular propeller shafts with needle roller universal joints and splined slip joints. On long-wheelbase chassis, the intermediate propeller shaft is supported in a ball bearing housed in two rubber trunnions.

Throughout the series, the rear axle is of the full-floating spiral bevel type with a straddle-mounted drive pinion and four-pinion differential assembly carried in adjustable tapered roller bearings. The axle housing is of one-piece pressed steel construction, of rectangular section at the spring pads. A two-speed rear axle with appropriate load capacity is offered as a factory-fitted option on all models and on some, there is a choice of axle ratios. The shift mechanism is vacuum operated, except when air-hydraulic brakes (optional on 7-ton chassis) are specified, when an electrical shift mechanism is fitted.

Prominent among the mechanical improvements are dimensional and structural changes to the chassis frames. On 5- and 6-ton chassis, the sidemembers are now ¼ in. thick, while the 7-ton frame sidemembers are 10 in. deep, 3 in. wide and $\frac{5}{16}$ in. thick. The crossmembers have been redesigned and at points of extreme stress they are of double top hat section. They extend outwards horizontally to take the form of gusset plates at the junction with sidemembers and divide vertically into alligator jaw attachments, which grip the sidemembers at the top and bottom flanges.



**The short-wheelbase 6- and 7-ton chassis in the new range, here seen with 6 cu. yd. tipping body are also available as articulated tractors; right, a 163¼-in. wheelbase 7-tonner with air-hydraulic brakes, rear helper springs and dampers and two-speed rear axle**

High-deflection dual-rate semi-elliptical springs are 50 in. long at the front, with a width of 2½ in. on 5- and 6-ton and 3 in. on 7-ton chassis. The rear springs are of the same width as the front springs and 48 in. long on short-wheelbase and 54 in. long on long-wheelbase chassis. Both front and rear springs are designed to have no camber under full load so as to improve stability. Rear helper springs and telescopic dampers are available as optional extras throughout the range.

On 5- and 6-ton chassis a tandem Hydrovac system is used, while on 7-tonners, an 8½-in. dia. vacuum servo of the pressure-reaction type is standard. Air-pressure hydraulic brakes are available as an optional extra on the 7-ton chassis. The brakes themselves are of the two-leading-shoe type and the front brakes have dual internal wheel cylinders to provide better distribution. All shoes are equipped with moulded linings, with a total lining area of 368 sq. in. on the 5-6 ton range and 480 sq. in. on the 7-ton range.

Hydraulic power-assisted steering is a standard fitment on 7-tonners and is an optional extra on all other diesel chassis. The steering gear is of the high-efficiency cam and lever type in which the lever peg is carried by a frictionless needle roller bearing. The front axles are more generously dimensioned than hitherto and all wheels have wide-base rims. Standard tyre equipment is as follows: 5-ton, 7.50-20 10-ply; 6-ton, 7.50-20 12-ply; and 7-ton 9.00-20 12-ply. There is a wide choice of optional tyres. The standard fuel tank has a capacity of 17 gal. on 5- and 6-ton chassis and 26 gal. on the 7-tonner. A 35-gal. fuel tank is offered optionally for all except the smaller short-wheelbase range.

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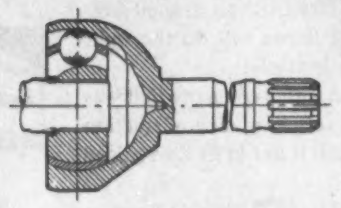

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# *NEWS FROM ALL QUARTERS*

### Railway Shopmen's Claims Rejected

The British Transport Commission has rejected a claim from the employees' side of the Railway Shopmen's National Council for a substantial increase in the rates of pay of railway workshop staff. A claim for the introduction of a 40-hour week for railway shopmen was also declined.

### More Light on Watford Line

Improved lighting now being installed by the London Midland Region at Watford Junction will give the station six times as much light as at present. Modern fluorescent illumination will be provided throughout most of the station premises. All stations on the Euston—Watford line are to be thus modernised.

### Learning to Queue in Budapest

Budapest, where, we are told, it has always been "every man for himself" in bus queues, is being taught how to queue for buses and trams in the city centre. Forty-seven inspectors and two traffic officers are supervising the experiment. Early reports show that queueing is successful at bus stops but not at tram stops where several routes are handled.

### Ross Motorway Started

Work on the Ross spur motorway was formally inaugurated by the Minister of Transport at a point one and a half miles from Ross-on-Wye on March 3. This is the third section of motorway to be commenced in this country, the first and second being the shorter Preston and Lancaster bypasses. The Ross motorway (see January 18 issue) will be 22 miles long.

### A Day in Holland by Rail

An excursion, giving a whole day in Holland, has been arranged for May 19 by the North Eastern Region. A special train starting at Newcastle upon Tyne goes to Harwich for the Hook of Holland. A full day of touring in Holland is also offered but, if preferred, bookings may be made either to Amsterdam or to the Hook only, exclusive of the meals and tours.

### Notting Hill Gate Scheme

The first stage in the £1 million London Transport rebuilding scheme for Notting Hill Gate Station is nearing completion. Work has now started on the installation of two of the three flights of escalators which will carry passengers to and from the Central Line, after the escalator tunnels, 23 to 30 ft. wide, have been driven to a depth of almost 100 ft. below the road surface. The tunnels have been lined with iron segments.

### B.T.C. Docks and Waterway Schemes

The public inquiry into the draft Harbours Charges Schemes submitted by the British Transport Commission for confirmation by the Transport Tribunal will be held at the Niblett Hall, 3 (North), Kings Bench Walk, Temple, London, E.C.4, on March 17, 1958, commencing at 10.30 a.m. Subject to the conclusion of this inquiry in due time, the inquiry into the inland waterways charges scheme will commence at the same place on March 24.

### Closing of Sharlston Station

From Monday this week, Sharlston Station, near Wakefield, in the North Eastern Region, has been closed to all traffic.

### Transport Needs No Defence

Too much was being heard, without protest, of suggestions that transport was impeding productivity, said Sir Reginald Wilson at the annual dinner of the Tees-side and District section of the Institute of Transport in Middlesbrough. Sir Reginald, president of the Institute, said he was getting rather tired of hearing suggestions that transport "was like the highwayman exacting a toll from the passer-by." Transport was in fact a creator of wealth; it needed to assert itself.

### More 40-m.p.h. Roads around London

The first large-scale experiment with the 40-m.p.h. speed limit will be launched in the London traffic area on March 15. It has been enforced since July last on a section of Edgware Way and since November on part of the new Great West Road extension. Over 50 lengths of main road, totalling 83 miles, will come under the new limit. On some 21 miles of the roads selected the normal speed limit of 30 m.p.h. is at present in force; on the remaining 62 miles there is at present no speed limit. Parking will be prohibited within a distance of 75 ft. on the advance side of pedestrian crossings on 40-m.p.h. or unrestricted roads, compared with 45 ft. on 30-m.p.h. roads.

### Lack of Uniformity in Road Regulations

The emergence and growing importance of interterritorial roads in Canada is throwing into relief the need for greater uniformity in road transport regulations as between the various provincial and other authorities controlling the different sectors of such routes. The prospect of early completion of the Trans-Canada Highway route has given renewed vigour to demands from the trucking industry for greater uniformity in provincial regulations from coast to coast. The principal points of difference affecting truckers include separate licence fees; various maximum lengths, widths and heights; different bills of lading; workmen's compensation; safety; lighting; and insurance requirements.

### Reliability of Radar Speed Measurement

The New York Court of Appeals has recently upheld the use of radar speedmeters in traffic cases. It said the device generally is reliable to measure the speed of moving vehicles, and therefore, its nature, function and operation need not be shown by expert testimony in each case. Although the court acknowledged that it had never before ruled upon the use of radar in speed detection, it called attention to the fact that several of the lower and appellate courts had given such use careful consideration. It concluded that the use of radar for speed detection now falls in the same category as reproduction by photographs, X-rays and electro-cardiagrams that are freely accepted in the courts for their general reliability without the necessity of offering expert testimony as to the scientific principles underlying them.

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## COMMERCIAL AVIATION

### Revision of Special Cargoes List

### INDIAN ADVISORY BODIES

A NEW and expanded edition of the world airlines code for handling special cargoes, including radioactive materials, will become effective on March 15, the International Air Transport Association has announced. Approximately 100 new commodities have been added to the list of those for which special packaging, labelling, stowage and handling are prescribed in the I.A.T.A. "Regulations Relating to the Carriage of Restricted Articles by Air." They include several types of insecticide and important industrial chemicals such as chlordane, D.D.T., dieldrin compounds, lindane, peroxide mixtures and sodium borohydride as well as other substances. The rules now cover nearly 2,500 types of cargo which require special handling. They make it possible to ship these commodities over routes involving more than one airline without delays for repacking or other purposes. Because of the rapid discovery of new isotopes and new uses for them throughout the world, I.A.T.A. representatives who administer the code are now studying the possibility of enlarging the range of radioactive commodities which the airlines will accept for shipment under prescribed conditions. The new third edition of the code has been issued in English, French and Spanish by the traffic director of I.A.T.A., Mr. John Brancker. Copies in English and Spanish can be obtained for U.S. $3.50 each from the traffic department, 1060 University Street, Montreal, 3, Canada. The French edition is available at $3.50 or fr.1,470 from the I.A.T.A. European office at 76-78 Champs Elysees, Paris, 8, France. The purchase price includes the costs of mailing and revisions for one year.

#### Train Service to Gatwick

British European Airways has issued a most useful leaflet summarising the train service between Victoria and Gatwick Airport from June 9. There will be usually three trains an hour, two of them with an extra two-car set attached for air passengers. These will take 39-40 min. on the journey. There will also be through trains to and from London Bridge.

#### Qantas Expansion Programme

Qantas Empire Airways has announced an airport expansion scheme at Mascot Airport, Sydney, in readiness for its fleet of Boeing jet air liners, the first of which will be delivered in May, 1959. It will cost £A6 million and involves diversion of a railway line which at present runs through the Qantas industrial area to the Bunnerong power station. The programme includes the provision of a jet engine test cell, a fuel tank farm, repair and overhaul shop, line maintenance hangar, block overhaul hangar and a technical training centre. Completion of the programme will expand engineering staff from 1,700 to 2,400.

#### Rugby Match Traffic

Over 3,000 rugby spectators are to fly to Dublin for the Ireland v. Wales international at Lansdowne Road on Saturday, March 15. Between March 7 and March 23 Aer Lingus will operate 146 return flights with Viscounts and DC3s between Cardiff and Dublin. In addition, Cambrian Airways will operate 13 DC3 flights during the same period. On Sunday, March 16, when most of the travellers will be returning to Cardiff and the first flight will leave Dublin Airport at 6 a.m.; the last will touch down at Rhoose Airport at 1.15 on the following morning. Throughout the greater part of the day, flights will be landing at Rhoose at 15-minute intervals.

#### Advisory Bodies for Indian Corporations

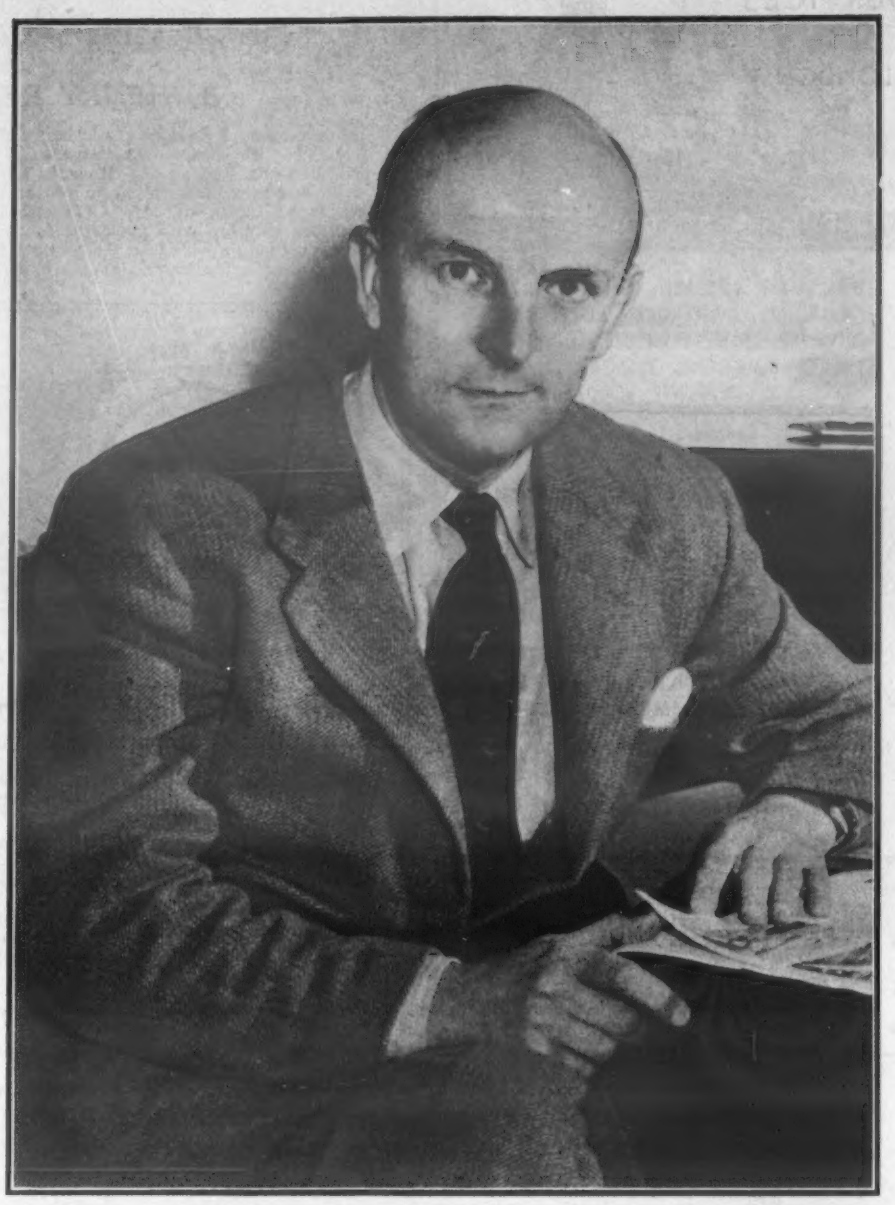
The Government of India has appointed two advisory committees, one for the Indian Airlines Corporation and the other for the Air-India International Corporation. The former comprises the chairman of the corporation as the chairman and 14 members. The general manager of Air-India International is the chairman of its advisory committee which also has 14 members. In addition to such matters as may be referred to these committees by the corporations, they may also advise the corporations in respect of provision of amenities for air travellers, improvement of services and facilities provided by the corporations, timetables of air services, proposals relating to opening of new air stations, and any other matter of general public interest or public convenience.

## SPEED IN TRANSPORT

(*Continued from page 5*)

I have ventured to say that subsonic jets will continue to do their 600 miles an hour or thereabouts right through the 1960s. There seems, however, to be no technical reason why the supersonic development of the world's air speed record could not also be followed by supersonic transports, flying at speeds of over 1,000 m.p.h. If one decided that the previous gaps which had existed between the world's air speed record and bomber speeds and transport speeds would be maintained then there is no reason why civil jets should not be in existence at supersonic speeds in the 1960s. I believe, however, the financial burden of depreciating the subsonic jets will alone make that impossible, and a supersonic jet in operation before 1970 is of academic interest only. When we do get a supersonic jet we get with it the ability to bring practically the whole world within reach of the 12-hr. journey time. I have tried to show that there is an increasing demand for a longer distance to be flown in 12 hours. I am certainly convinced that nothing will stop the ultimate operation of long-range supersonic civil aeroplanes. I believe that the operating costs when the time comes will be within reasonable distance of the operation costs—as we know them—of the subsonic jets. If I might hark back to our friends the Americans, and the position that we the British hold today in the west—we have all the operating experience in turbine-engined transport with a propeller-turbine or pure jet and I see no reason why we should not have our own great stake in this new field of supersonic civil travel. If it is true that we are not going on with a supersonic long-range bomber, then let us spend the money on a supersonic long-range transport. This should not be hampered by following the basic design for a specialised military application in which economy is not a major factor. Let us make a virtue of necessity and put our effort into an optimum civil aeroplane.

# PRESIDENT OF THE R.Ae.S.



George Edwards.

## Sir GEORGE EDWARDS, C.B.E., B.Sc., F.R.Ae.S., A.M.I.Struct.E.

• • • • • •

The presidential address which Sir George Robert Edwards delivered last week to the Royal Aeronautical Society lived fully up to the expectations of those who had anticipated a concise and thought-provoking contribution delivered with a judicious admixture of gentle irony. Sir George, managing director of Vickers-Armstrongs (Aircraft), Limited, has had a most successful career in the aircraft industry. Born on July 9, 1908, and educated at the South-West Essex Technical College and London University, where he took his B.Sc.(Eng.), he was from 1928 to 1935 engaged in general engineering. In the latter year he joined the design staff of what was then Vickers (Aviation), Limited, at a time when the company was closely engaged upon the development of the Wellington bomber embodying the geodetic system of construction. Following the outbreak of war in 1939 he was appointed experimental works manager and, as such, was closely concerned with many special and urgent projects. On the death of the then chief designer, Mr. Rex Pierson, in 1945, he was appointed to succeed him at the age of 37. His first task was to produce as quickly as possible a medium-range transport aircraft and the Viking, on which design work was completed in 1945, first flew in June of the same year. Production aircraft entered service with British European Airways in September, 1946, and more than 160 were subsequently sold; many of them are still at work. Keenly alive to the possibilities of turbine-engined aircraft, Sir George produced a Viking powered by Rolls-Royce Nene jet engines for the Ministry of Supply and the Vickers Viscount with four Rolls-Royce Dart turboprop engines. The success of the latter has been, and continues to be, one of the most noteworthy stories of British aircraft development. In addition to this achievement in the civil field, there came the design and production of the Valiant, the first four-jet bomber to enter Royal Air Force service. Sir George became general manager, aircraft division, Vickers-Armstrongs, Limited, in 1953 and, following the death of Sir Hew Kilner later in the same year, was appointed managing director. Two years later he joined the board of Vickers, Limited, the parent company; also in 1955 Vickers-Armstrongs was reorganised as a holding company and its aircraft division became Vickers-Armstrongs (Aircraft), Limited. Under his overall supervision as managing director has come the development of the turboprop Vanguard now on order for B.E.A. and Trans-Canada Air Lines and the jet VC 10, of which the British Overseas Airways Corporation has ordered 35. He was created a member of the Order of the British Empire in 1945, a commander of that order in 1952 and a knight in the New Year Honours of 1957. Elected a fellow of the Royal Aeronautical Society in 1946, he was awarded the George Taylor Gold Medal in 1948 and the British Gold Medal for Aeronautics in 1952.

## THE LATE C. K. BIRD

### A Tribute

*By CHARLES HOPKINS*

IT is tragic that the announcement of C. K. Bird's early retirement should so quickly be followed by the news of his death. When British Railways, and the Eastern Region in particular, were deprived by ill health of his invaluable daily services there was every hope that even after his retirement C. K. Bird's brilliance of intellect and breadth of experience would be drawn upon in times when so highly qualified a source of counsel would have a valuable contribution to make to the solution of railway problems.

That hope has been extinguished by the sad news of February 28.

But sadder still is the contemplation of the gap that is left among C. K. B.'s colleagues, for he had a great capacity for making friends.

#### Human Approach

His academic career has been described in other columns from time to time—most recently when his retirement had to be announced; it was an exceptional brilliance that he brought to his appointment as a traffic apprentice with the former North Eastern Railway. That brilliance illumined his railway career—to the end of his training period (if indeed a North Eastern traffic apprentice's training ever ends) and through the positions of increasing responsibility that he occupied; through district staff assistant, assistant to the chief general manager and area goods manager, to divisional general manager (L.N.E.R.) and finally regional general manager of British Railways. Every position he took up he adorned, because to every new task, every fresh promotion, he brought a peculiarly human approach that was his own most outstanding characteristic.

#### Intellectual Gifts

Exceptionally gifted himself, he found no difficulty in bridging any intellectual gap; his modesty could never understand the lustre that his own traffic apprenticeship, and his advancement in the service, reflected upon the company that he joined and the nationalised industry of which it became a part. Always learning new things himself, with a zest that continued even through the later months of ill health and strain, he knew how to encourage enthusiasm for learning among others.

Convinced of the importance of education in its widest sense, he imparted his convictions to all with whom he came in contact, and in particular the Railway Students Association will long remember his presidential year on that account.

Wise from long experience in management, impeccably loyal and invariably tolerant, he was an inspiration to his immediate colleagues, who mourn his loss.

C. K. Bird leaves in railway circles a record of outstanding intellectual and professional example and encouragement, for which his memory will be treasured at all levels in the railway service.

## IN PARLIAMENT

### Rail Freight Traffic Setback

THE downward trend of railway freight traffic was marked with anxiety, said Mr. G. R. H. NUGENT, Joint Parliamentary Secretary, Ministry of Transport, in a debate on the second reading of the B.T.C. Bill on February 25. The Minister of Transport was now considering and reviewing with the chairman of the B.T.C. the progress of the modernisation programme in the light of this trend in freight traffic. He affirmed that the Government was fully behind the modernisation plan.

MR. ERNEST DAVIES had referred to the retardation of the plan because of restrictions on capital expenditure. Unless modern equipment was delivered, he said, the Commission would not be able to hold its traffics, let alone increase them, and a disastrous fall was now taking place in some of those traffics.

If the four-week period to December last was compared with the same period in 1953—during which period there had been an increase in production—it was found that the carriage of merchandise alone had fallen by 1 million tons, which was a decline of no less than 25 per cent, and that coal had fallen by 1,150,000 tons, i.e. by 8 per cent. Production of coal since 1953 had also increased.

#### Road Competition

One cause, said Mr. Davies, was acute road competition and he alleged that it was from hauliers who were employing drivers who worked excessive hours so that they could cut rates and take traffic from the railways. The C-licensee, also, was "known to be abusing his licence" and carrying goods for hire or reward. The railways must be permitted to get ahead far more quickly with modernisation.

It was said that the permitted expenditure of £151 million for 1958 and £145 million for 1959 represented decreases of only £6 million this year and £5 million next on the planned expenditure, but the cost of the total scheme had risen with prices from £1,200 to £1,500. Thus the expenditure this year and next ought to be £170 million and £175 million respectively. Viewed in this way, there was a shortfall of £25 million and £30 million.

#### C-Licence Questions

The Minister of Transport was asked by MR. ERNEST DAVIES to report on the composition of C-licensed fleets, showing those with fewer than 10 vehicles and those with more, in graduated steps, but MR. H. WATKINSON said to extract this information would require a disproportionate use of labour. He indicated, however, that the survey to be made in April would, as before, show percentage of loaded and empty running and produced a table showing the break-down of the national C-licensed fleet by unladen weight.

NUMBER OF GOODS VEHICLES AUTHORISED UNDER C LICENCES ACCORDING TO UNLADEN WEIGHT CATEGORIES AS AT DECEMBER 31, 1957

| *Unladen weights in tons* Exceeding | Not exceeding | |
|---|---|---|
| — | 2 | 750,908 |
| 2 | 3 | 238,409 |
| 3 | 4 | 45,337 |
| 4 | 5 | 16,930 |
| 5 | 6 | 8,118 |
| 6 | 7 | 3,900 |
| 7 | 8 | 3,142 |
| 8 | 9 | 1,895 |
| 9 | 10 | 1,047 |
| 10 | — | 506 |
| Grand total | | 1,070,201 |

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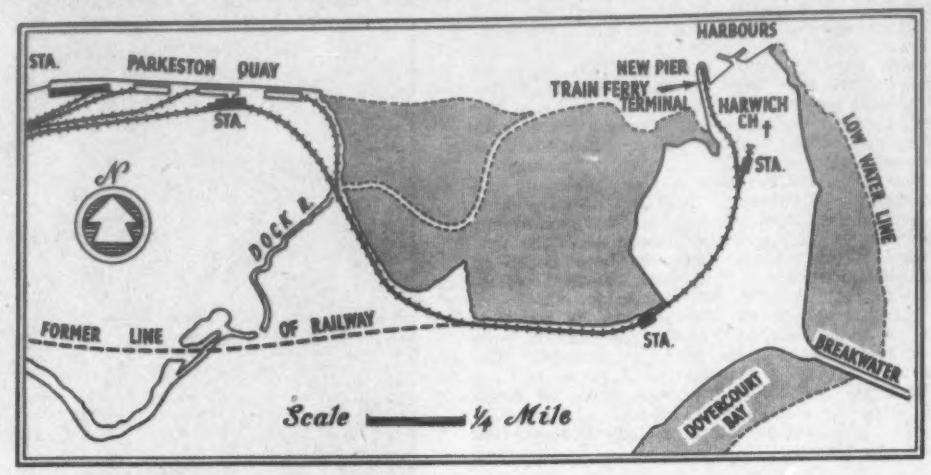
# SHORT SEA ROUTE PORTS

## 2—Harwich*

*By HENRY REES, M.Sc.(Econ.), Ph.D.*

ON the low coast of East Anglia, where Suffolk marches with Essex, the estuary of the Orwell meets that of the Stour to form a bay a mile across, and sheltered to the east by a south-pointing sandspit. This is Harwich Harbour, and the town lies on a peninsula formed of London Clay which projects into the harbour from the southern shore. The name Harwich is derived from the Old English "herewic," meaning a camp, and refers to the fortification (probably Saxon), now eroded by the sea, which formerly existed on the low cliffs to the east of the town. The original settlement in the district was Dovercourt, about two miles inland, where a gravel-capped ridge provided a healthy, dry site and where pure water could be obtained from shallow wells.

Vessels on their way to or from Ipswich frequently put into the harbour for repair or for provisions, and Harwich grew up in the middle ages to supply their wants; by the early fourteenth century it had become chartered as a borough. There was little basis for trade, however, for the town lay on no important route, and the townsfolk busied themselves with fishing and with the victualling, repairing and building of ships. It was, indeed, an unattractive site, somewhat marshy and with an inadequate water supply; water was even brought by boat across the Orwell mouth from Shotley.




The port of Harwich showing the relationship of the packet berths at Parkeston Quay and the train ferry terminal at New Pier

### Historic Harbour

There was, however, a fine, deep and sheltered harbour; it was well placed to guard the approaches to London, and in later times it faced our potential enemies, the Dutch. In 1653 England was at war with Holland. Harwich first attracted the attention of the Admiralty in the following year, when it took the first timid step in the establishment of a dockyard by purchasing there a single house. Eleven years later we were again at war with Holland, and dockyard work began in earnest. Anthony Deane was appointed master shipwright, and later became the most eminent builder of his day. The war ended in 1667, the usefulness of the yard declined and it was closed in 1713; shortly after, however, it was reopened as a private yard, and warships and merchantmen continued to be launched there until 1827.

Meanwhile, in the second half of the 17th century, a service of packet boats had been instituted to carry mails and passengers between Harwich and Holland. The Dutch terminus was usually the port of Hellevoetsluis, on the north bank of the Waal, the chief mouth of the Rhine. Dutch bankers and goldsmiths were perhaps fellow-passengers with humble weavers. At first the vessels were heavily armed; but after the accession to the British throne of the Dutch William III and Mary, his Stuart wife, in 1689 the design was modified for the sake of greater speed. About this time, as a contemporary engraving shows, Harwich, with its noble church and its straight High Street, was fortified by a wall and moat which enclosed a rectangular area at the tip of the peninsula. The opposite shore was guarded by a citadel in the characteristic geometrical design of the period.

### Revival of the Packet Port

By 1730 four vessels were engaged in the packet service; each was about 80 gross tons in capacity and contained berths for about 25 passengers. Suspended during the Napoleonic wars, the service was resumed in 1801, with nine vessels taking part; but it could not compete with the Dover—Calais route and it ceased operating for a whole generation.

It was the steam age which revived Harwich as a packet station. The railway from London reached Ipswich in 1846 and Harwich in 1854. It was a period of great economic advance, both in England and on the Continent. The Ruhr coalfield was being opened up and Belgium was developing its manufactures. Harwich, now within easy reach of London, was conveniently placed for trading with Rotterdam, with its growing Rhineland traffic, and was one of the nearest English ports to Antwerp (Yarmouth and Lowestoft are in fact about five miles nearer, but are almost twice as far from London compared with Harwich).

*(To be continued)*

* No. 1 appeared February 15.

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# VEHICLE TEST PLANT

## *Chassis Dynamometer Saves Time*

MUCH of the information required to determine the overall performance of a road vehicle and to ensure the correct matching of fuels and engines so that the most efficient use can be made of both can only be obtained by putting the vehicle through repeated tests under identical operating conditions. In the past, these tests have generally been carried out on the road or some suitable track, but variations in road surface, traffic conditions and weather make accurate reproduction of conditions through a protracted series of tests practically impossible.

More recently, there have been developed a number of indoor test plants on which the

**A general view of the control room of the Heenan motor vehicle test plant**

majority of the tests hitherto carried out on road or track can be undertaken more conveniently. Moreover, the use of such a plant results in greater accuracy, since controlled conditions can be exactly reproduced as often as required, and higher productivity, since test runs can follow each other on the machine in quick succession. Road tests invariably suffer interference from other traffic and there is great loss of time in getting test vehicles and gear to specially prepared trades, while all outdoor testing is subject to delay due to weather conditions.

### Ethyl Company's Engine Laboratory

Such a vehicle test plant, or chassis dynamometer, has been built and installed by Heenan and Froude, Limited, at the Bletchley engine laboratory of the Associated Ethyl Co., Limited. Evolved by the two companies in collaboration, the plant is not intended to be a comprehensive substitute for road testing, but it does overcome many of the difficulties of conventional testing and provides information that could not accurately be obtained on the road. The new plant is notable for its versatility, having been designed to accommodate vehicles from small cars to commercial vehicles, with a driving-axle weight of up to 8 tons and to operate up to speeds equivalent to 140 m.p.h. Both front- and rear-driven vehicles can be accommodated and a flexible air-ducting system caters for front and rear engine positioning.

The plant provides for a wide range of powers and speeds; a wide range of mass inertia loads to cater for existing and projected vehicles; regulation of air flow to simulate normal cooling conditions through radiator and to tyres experienced at equivalent speeds on the road; motoring facilities to produce reverse-torque loading of transmission and engine as in overrun with rapid changeover between driving and motoring without change in vehicle speed; variable load-speed characteristics for both driving and motoring conditions to simulate gradient and load effects; and a comprehensive instrumentation and control system.

### Design Details

To meet these requirements, an unusual design has been adopted in which the vehicle driving wheels rest on and drive two 4 ft. dia. by 2 ft. wide drums mounted on the half-shafts on an Eaton 18500-series two-speed commercial vehicle axle. Axle ratios are 4.5 and 6.14 to 1 and the differential is locked. The pinion shaft of the axle is coupled through a universal-jointed propeller shaft to an inertia-disc assembly, the weights of which are quickly interchangeable to provide, with the two-speed axle, for a wide variety of vehicles. Apart from the locked differential, specially lapped gears for operation in the reverse direction and a circulatory lubrication system, the Eaton axle is standard. The gear change is electrically operated and the standard brakes (used to hold the drums stationary while a vehicle is being loaded or unloaded) are air-pressure operated. The drum axle is freely mounted in two trunnion bearings and fitted with a torque arm which is connected to an Avery springless weigher in the control room.

The inertia-disc assembly is mounted on ball and roller bearings in independent pedestals with accuracy permitting it to run up to 6,000 r.p.m. It is connected by a gear-tooth coupling to a Heenan Mark II Dynamatic (eddy-current) dynamometer capable of absorbing 300 b.h.p. over a speed range of 2,400 to 6,000 r.p.m., load and speed being controlled electronically from the control room. The outer end of the dynamometer shaft is coupled through a universal-jointed propeller shaft to a second Eaton two-speed axle, also with locked differential, the half-shafts of which carry multi-vee-belt pulleys which drive either of two centrifugal fans for supplying the vehicle radiator cooling air.

One fan absorbs 90 b.h.p. at 600 r.p.m., giving the plant a total absorption capacity of 390 b.h.p., and the other 7½ b.h.p. at 645 r.p.m. Either fan can be connected to its drive through a pneumatically operated friction clutch and both feed into a common duct having an outlet area at the vehicle end of 9 sq. ft. Ducting in the vehicle room is adjustable in length and is fitted with variable names to direct the air stream as required by the vehicle on test. By regulation of fan inlet dampers, air speeds up to 80 m.p.h. at the radiator grille are obtainable. Two separate fans with associated ducting supply air for tyre cooling.

### Motoring

A 100-b.h.p. constant-mesh electric motor provides power for motoring the vehicle on test. The motor is coupled through a propeller shaft to a variable-speed Heenan Dynamatic coupling having a maximum output of 95 b.h.p. at 1,375 r.p.m. The output member of the coupling is connected through a rubber bush-type flexible coupling to an extension of one of the half-shafts of the fan-driving axle, the drive to the road wheels of the test vehicle following a reverse path back to the drums.

A pneumatically operated friction clutch controlled from the control room permits the motoring facilities to be brought into and out of operation as required, while the Dynamatic coupling gives infinitely variable control of motoring speed.

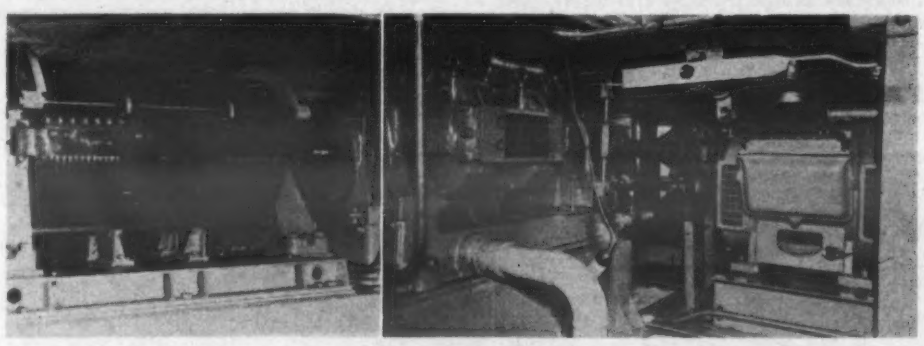
Practically all the equipment is located in a basement immediately beneath the vehicle room and the architecture and plant have been planned to provide for easy access and removal for maintenance and renewals.

### General Facilities

When the vehicle is set in position for test, it is firmly anchored by means of adjustable clamps on the front wheels. Safety jacks are placed under the driving axle to provide support in case of tyre failure. Other features include an exhaust-gas collector, automatic temperature regulating lubricating system for both two-speed axles, water circulatory system for the dynamometer, a Heenan water cooler and various safety devices.

A louvred panel in the side of the building admits fresh air into the basement for the fans and a similar panel in the main access doors allows cooling air to be exhausted after passing over the vehicle. Two further louvred panels between the vehicle room floor, remotely controlled from the control room, permit closed circulation between vehicle room and basement for regulation of cooling-air temperature.

The control room is glass-fronted and overlooks the test vehicle. The control desk is conveniently placed and laid out, with the two dials indicating drum-axle torque and dynamometer load prominent in its comprehensive instrumentation. For occasions when it might be necessary or desirable to regulate the dynamometer load from the driving seat of the test vehicle, a portable electronic control unit is provided.



**These views in the basement show the removable weights used to adjust the inertia of rotating parts to suit the type of vehicle on test and, right, the Heenan 300-h.p. Dynamatic dynamometer coupled to an Eaton two-speed axle which drives the fans. The electric motor on the right provides power to motor the chassis on test (overrun condition) and additional power for the fans when required**

## HIGHWAY LAW CONSOLIDATION

### Committee to Inquire

FOLLOWING the announcement by the Minister of Transport that a draft Bill to consolidate the enactments relating to highways has been prepared, he has, with the Minister of Housing and Local Government and Minister for Welsh Affairs, set up a committee with the following terms of reference:

"To examine, with a view to consolidation, the public general enactments relating to highways, streets and bridges in England and Wales, other than enactments designed to regulate traffic or applying exclusively to London; to consider which of the enactments should be consolidated and what amendments not of substantial importance (including consequential amendments of the common law and the general enactment of non-controversial provisions commonly found in local Acts) are desirable, in connection with the consolidation, either to improve the form of the law or for the removal of anomalies, inconsistencies and ambiguities, for abrogating provisions which are obsolete or otherwise unnecessary or for modernising procedure; and to report whether in the opinion of the Committee the draft Bill submitted to them, either as submitted or with such alterations as they think fit to suggest, satisfactorily achieves such a consolidation and embodies no amendment of the law of such importance that it ought to be separately enacted."

The Marquess of Reading is to be chairman of the committee, which will comprise representatives of county councils and local authorities and of the two Ministries indicated above, as well as two members of Parliament. Its secretary is Mr. S. Emm, Ministry of Transport, 21-37 Hereford Road, London, W.2.

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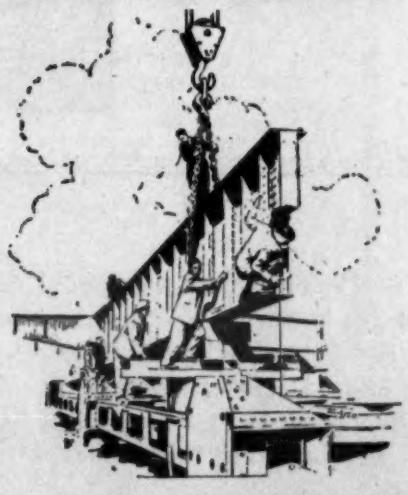

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# NEW SIGNALBOX AT CANNON STREET

## *Replacement After Fire*

### SMART WORK BY SOUTHERN REGION

THE new signalbox at Cannon Street, Southern Region, was brought into service on December 15 and the men have now got into their stride in using the new equipment despite an exceptional number of untoward incidents at other places which have combined to upset train running in this area. It has enabled the resumption of full service at this terminal, interrupted by the signalbox fire of April 5, 1957.

By May 5 very smart work on the part of the signal engineer and his staff enabled a 47-lever frame to be installed temporarily in the staff rooms of the destroyed box; it was then possible to use platforms 1 to 5 under complete signal protection and to make use of platform 6 under certain circumstances. Platforms 7 and 8 remained out of use, with the points clipped and padlocked.

#### Earlier Boxes

The first box at Cannon Street was built across the five tracks existing in 1866 on the bridge across the Thames and was equipped by Saxby and Farmer. When the approach was widened a quarter of a century later by the South Eastern and Chatham Railway two boxes with a total of no fewer than 375 levers were employed to control the terminus. When the Eastern section of the Southern Railway was electrified the track layout at Cannon Street was remodelled, this involving a short period of complete closure. Multiple-aspect colour-light signalling was installed in the area and a 140-lever Westinghouse mechanically interlocked power frame was provided in June, 1926. The box stood at the outer end of platform 8 and although of wooden construction it stood up to explosive and incendiary attacks during the war and did not appear to exhibit any undue fire risk. The exact cause of the fire in the early hours of April 5 last could not be ascertained but it is assumed to have been a cable fire in the relay room.

Fortunately it was possible to obtain from the London Midland Region a 227-lever power frame which had been stored at Crewe in the war for air raid precaution purposes; no time was lost in sending it to the Southern Region Wimbledon signal works in 40 packing cases. The temporary frame comprised 47 levers taken off this unit and the equipment included some 200 relays. Rapid arrangements were made by the chief civil engineer of the Southern Region, Mr. F. E. Campion, to provided a new permanent box, the site of the former turntable on the east side of the line at the south end of the bridge being chosen. The track is here carried on brick arches and special work in clearing the site and in connection with the foundations of the box was being carried out inside a fortnight from the date of the fire, while the temporary box was still being adapted.

#### New Works

Early in July, when Taylor Woodrow had completed the brick lower floor of the box to the requirements of the chief civil engineer, the signal engineer, Mr. L. J. Boucher, was in a position to arrange for erection of relay racks and panels and to start the installation of 110,000 yards of wiring. On July 29, although the first floor where the signal frame is housed and its roof were still not finished off, the 167-lever power frame, of Westinghouse L type, was placed in position. By continuous work 425 relays with 16,000 connections, including reception of 23 multi-core cables (most of them with 40 cores each) on the cable panels, the fuse panel with over 1,000 fuses and the frame with 20,000 connections were installed in fewer than 90 working days so that testing could begin.

The extensions of platforms 1 to 5 at Cannon Street had already taken place before April last under the 10-car train programme and it was also possible to use platform 6 for 12-car Hastings diesel-electric trains under special arrangements. Opportunity was taken to extend the remaining platforms for 12-car trains uninterruptedly while the station was in partial use only and to make corollary alterations to the connections. The result is that platforms 1 to 4 are suitable for 10-car trains and Nos. 5 to 8 for 12-car units (which will enter in increasing numbers with the forthcoming Thanet electrification). From platform 1 trains can leave for the down local or down through lines; they can reach platform 1 only from the up through (served by platforms 4 and 6 at London Bridge). From the other seven platforms trains can run to the down local or down through to London Bridge or the "out Met." (outward via Metropolitan Junction) in the Charing Cross direction, which is used also by empty stock going via Blackfriars Bridge to Snow Hill sidings and by locomotives proceeding to Ewer Street depot.

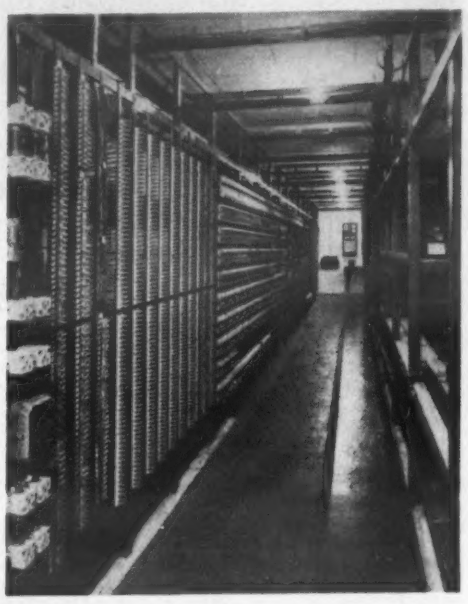
The inward routes are shown by platform number indicators at the three-aspect inner home signals, levers Nos. 81 to 88 corresponding to the entry to platforms 1 to 8 from the up through, while levers 102 to 108 correspond to movements to platforms 2 to 8 from the up local. A position light indicator is illuminated on the curve from Metropolitan Junction to show when the road is set for running to a platform via the up local line. Outward indicators show L for down local, T for through and B for outward Metropolitan. On No. 5 platform there is a connection by which short trains can reach the down lines by an alternative route and the third aspect

(*Continued on page 14*)

**The L-type 167-lever Westinghouse frame at Cannon Street with train describers and temporary illuminated diagrams above it**


TELEPHONES
ROUTE INDICATORS SHEWN THUS R.1.7, THE NUMERAL SHEWS THE NUMBER OF ROUTES AVAILABLE
R.1.2 SHEWS L FOR DOWN LOCAL T = = THRO
R.1.3 SHEWS L FOR DOWN LOCAL T = = THRO B = OUT MET
R.1.3 SHEWS L FOR DOWN LOCAL T = = THRO 5 ALONG Nº 5 PLATFORM
14 YDS
66 YDS
432 YDS
PLATFORMS 1&2
PLATFORMS 3&4
PLATFORMS 5&6
PLATFORMS 7&8
TRAIN READY TO START PLUNGERS
SAND DRAG
UP SIDING
CANNON ST PREFIX 'C'
R.1.3 SHEWS L FOR DOWN LOCAL T = = THRO B = OUT MET
BOROUGH MARKET JCT. DOWN HOMES PREFIX 'B'
SIGNAL BOX
DOWN LOCAL
DOWN THRO
UP LOCAL
UP THRO
BOROUGH MARKET JCT
To London Bridge
OUT MET
IN MET
MET SIDING
METROPOLITAN JCT. HOME
METROPOLITAN JCT. PREFIX 'M'
SIGNAL BOX
DETONATOR PLACERS
ENGINEERS SIDING
SECTION CUT HERE
METROPOLITAN JCT. INNER HOMES
R.1.2 SHEWS 8 FOR PLATFORM Nº 8 7 = = Nº 7
R.1.7 (PLATFORMS 8 TO 2) UP LOCAL
R.1.8 = 8 TO 1 UP THRO
To Ewer St
To Blackfriars
To Charing Cross

**Track layout and signal positions controller from the new signalbox at Cannon Street, Southern Region. Provision is made to incorporate operation of Borough Market Junction later if desired**



**Fuse and cable termination panel in relay room**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AP33

# TRANSPORT AND THE E.F.T.A.

## *Some Possible Effects on Britain*

*By A. G. MARSDEN, C.B.E., M.Inst.T.**

WESTERN Europe absorbs at present some 25 per cent of Britain's total exports. The effects of the European free trade area will no doubt be to create new trade and to divert certain existing trade amongst its wide range of members, but it is to be hoped that its trade-creating effects will be the greater—certainly so far as the United Kingdom is concerned. If it has any purpose at all it is bound to stimulate substantially cross-Channel movements—both in the shape of trade diverted and trade created.

As an island, Britain possesses around its coast-line a wide range of ports both large and small, whilst much of its industry is located in or reasonably adjacent to port areas. Are we using these basic resources as well as we might? We shall start at a disadvantage from the point of view of transport and distribution costs in a number of markets in Western Europe because of our geographical location, as compared with our Continental competitors, but much can be done, if the will to do so is there, in narrowing this margin of disadvantage, I am convinced.

### Comments from Western Europe

A few comments from Western Europe upon Britain's position from the angle of distribution under F.T.A. may be mentioned here. Whilst fully agreeing that British manufacturers and their agents, in an endeavour to increase their trade in Western Europe, must study carefully the various inland transport services in Western Europe and use them intelligently, they emphasise that Britain should make the maximum use of direct water transport to Continental destination towns from her ports—both large and small—by regular, coast-wise or charter services, on the premise that once goods are loaded into ship this should be the cheapest form of movement. In their view, opportunities for exploiting this, through services already existing and through others capable of development, are great.

The importance of the regular cross-Channel liner services and the value of train ferry and roll-on roll-off road ferry services, etc., was freely acknowledged, of course, but emphasis was placed upon the fact that very many important centres of Western Europe are directly served by navigable rivers, such as the Rhine, Elbe or Seine, with no further inland transport problem beyond that of local delivery. These direct routes could with advantage be used and, if necessary, developed, it was felt, beyond their present capacity by individual traders or groups of traders, or by a trade as a whole. Although the actual movement time might on occasion take longer than that offered by the regular and frequent services to main ports, it would in their opinion be economical in cost and secure the inherent advantages of a direct service to customers.

### Matters of Disadvantage

I was asked whether a wider range of British manufacturers would not be prepared to show more willingness to quote prices "delivered home," rather than quoting—as is so often the case—"f.o.b. U.K. port," and thereby placing the burden of arranging forward transport from British port to Continental destination—plus all documentation and insurance, etc., details—upon the purchaser; an important selling point which, it was felt, operated to our disadvantage at present. The opinion is also held that in certain instances Britain is spending far too much upon her packaging of goods to Western Europe. It was stated that we seemed to have two standards of packing only in some of our trades, i.e. home and export, goods sent on the brief cross-Channel journey being packed as though to stand tropical conditions and journeys half across the world.

One point frequently made was that Britain's success in a wide range of the markets could well depend in great measure upon the efficiency of its port handling equipment and labour costs. There, I suggest, a finger has been placed upon a somewhat vulnerable spot. Who can honestly say that these requisites exist as fully as they might do in our ports or wharves today?

### Need for Thoroughness

One wonders whether British traders as a whole—there are outstanding exceptions, of course—are as yet fully alive to the potentialities as well as to the dangers of F.T.A. in our time, and all it may mean to this country. Britain is an extremely attractive target to Western Europe suppliers under F.T.A., and this is already confirmed by the forward and searching inquiries now coming from those sources—sources very much alive to the advantages to be achieved from modern materials handling methods, which they have so largely adopted themselves. As a result of my studies I have been much impressed by the thoroughness of inquiries from the Continent for information on the building up of through rates—"delivered home"—and the best routes and ports through which to serve a wide range of centres in the United Kingdom.

For British manufacturers to sell under f.o.b. U.K. port terms, as is so often done today, allows the purchaser to select the port of loading most suitable to himself and his forward transport plans. Because of the terms of sale the British seller is compelled, if the buyer so demands, to incur unnecessarily heavy inland haulage in the U.K. Why should the Continental buyer be so permitted to develop his transport plans to suit himself? With rather more effort and a proper understanding of transport "on costs," the British manufacturer can retain to his own hands the economies and benefits of efficient routeing of his products to Continental destination.

It is perhaps opportune at this point to press, once more, upon the Government the great need to give urgent attention in its road development programme to improving the approach roads to a wide range of selected ports. Capital expenditure dispersed thus, rather than concentrated, for instance, upon a new trunk road to the South-East Coast, is of much greater practical help at this stage to trade and industry in dealing with its current and approaching potential problems. It is very much a matter of deciding upon priorities.

### Shipping to the Continent

The United Kingdom is well supplied with regular coastal liner services to the Continent operating from and to a wide range of ports. These services as they exist are capable of dealing with a reasonable increase in traffic occasioned by F.T.A. Furthermore, they can very readily be augmented by tramp vessels as occasion demands. As a user of transport, one cannot but be impressed by the forward-looking policy of shipping companies, whether B.T.C. and their associate companies or the competitive cross-Channel shipping lines. Most of the larger cargo liner services have already equipped themselves or are in process of providing themselves with new vessels designed for a substantial increase in container traffic and for dealing with pallets. All of which helps towards a quicker turn-round of ships, better transits, and, in the case of containers, less pilferage and damage to goods.

Existing rail ferry services to the Continent—Dover—Dunkerque and Harwich—Zeebrugge, 22 and 10 sailings a week on average respectively—are not yet in aggregate fully extended for freight traffic, although some additional shore installations in the shape of depots—not a difficult matter—might be required. These particular services, carrying at present nearly half a million tons of cargo a year, may be said to integrate in some degree our railways with those of the Continent.

The recent development of a road ferry service to the Continent via the Tilbury—Antwerp route is a move of some significance, and although of short duration it is already making good progress and will surely develop. In this connection the very excellent trunk roads now being completed by the Belgian Government should provide a speedy and economic transit route for British trade to West Germany, Holland and France for traffic shipped in lorries, trailers or containers, in particular. One would like to see the Tilbury—Antwerp road ferry repeated between several other pairs of ports in different parts of the country, to serve trade arising locally and in the immediate hinterland, thus dispersing effort and reducing inland U.K. haulage.

### Vehicle Licensing and F.T.A.

When self-propelled British vehicles cross the channels with their loads, they do so with the intention of using the roads of other countries. British public hauliers and traders using their own vehicles will find themselves faced with limited difficulties which vary with the different countries. No special permit, I understand, is required in the case of Holland, Luxembourg and Switzerland and there is some relaxation for traders' own private vehicles in Belgium. Otherwise an authorisation is necessary for our commercial vehicles to operate in France, Belgium and Italy. So far as Germany is concerned the position is not too clear, as regulations in this connection are being tightened up.

A good deal of liberalisation does in fact exist in Continental countries, usually under a series of bilateral agreements which work reasonably well in practice, and that is what matters. We surely can only establish ourselves in Europe under a basis of reciprocity and we cannot hope to partake of liberalisation unless we are prepared to extend it equally to others. We shall no doubt get what we give!

Clearly, the Road and Rail Traffic Act of 1933 will require amendment in the light of the changed circumstances created by F.T.A., and here one looks to the Government—the advocate of Britain within an F.T.A.—for the necessary effective and prompt action. One noted with much interest the other day that the Road Haulage Association had decided to set up its own international road transport committee. A very necessary step, one would feel, and this particular subject is one to which it will no doubt give urgent examination.

*Abstract of the latter part of a paper presented at the City of London College on February 27. The author is a vice-president of the Institute of Transport and was lately transport adviser to the board of Unilever, Limited.

## COMMER AND KARRIER REDUCE PRICES

### Specifications and Quality Unchanged

DESPITE generally rising costs of materials, Commer Cars, Limited, and Karrier Motors, Limited, have both announced substantial reductions in the prices of a number of Commer and Karrier commercial vehicles. The new prices, which became effective on March 6 and amount to as much as £46 in some cases, have been made possible by increased sales at home and overseas which, with a streamlining of production, have resulted in increased efficiency and reduced production costs.

Some examples of the reductions are given below:

| | Down by |
|---|---|
| Commer 12-ton forward-control Rootes-diesel tractor .. | £46 |
| Commer 7-ton forward-control Rootes-diesel chassis cab | £40 |
| Commer 5-ton forward-control Rootes-diesel chassis cab | £40 |
| Commer Superpoise 3-4 ton P6 diesel chassis .. .. | £31 |
| Commer Superpoise 5-ton P6 diesel chassis .. .. | £31 |
| Commer 1½-ton forward-control steel van .. .. | £12 |
| Commer Avenger 41-seat passenger chassis .. .. | £30 |
| Karrier Gamecock 3-4 ton Rootes-diesel chassis cab .. | £40 |

Arrangements have been made for production to be stepped up immediately at the Luton and Dunstable factories in anticipation of the greater volume of business which is likely to result from the increased value for money which the Commer and Karrier ranges offer. In achieving these striking reductions the manufacturers emphasise that quality has in no way been sacrificed; on the contrary, the traditional policy of building up to the highest standard rather than down to a price will steadfastly continue.

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The regional office of the Timber Development Association at 8 St. Georges' Place, Brighton, has been closed and transferred to the head office of the association. Advice on timber and timber construction will now be dealt with by the Regional officer and the technical staff in London at 21 College Hill, London, E.C.4. Telephone No. City 4771.

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Pye Telecommunications, Limited, has added a 15-watt equipment to the Ranger range of dash-board-mounting v.h.f. radiotelephones. The Ranger was introduced last year as a 5-watt set, the first in the world to offer 25-k.c. channel spacing. The new heavy-duty set offers very long working range and has a transmitter output of up to 15 watts with amplitude modulation and 20 watts with frequency modulation, yet is designed to fit unobtrusively into any vehicle, boat or railway locomotive.

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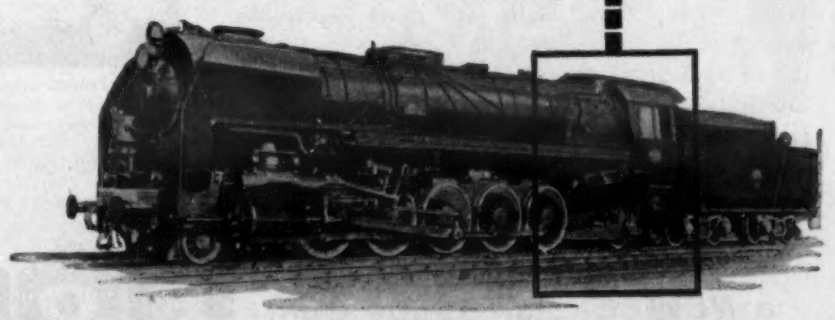
BOLTON'S HIGH CONDUCTIVITY COPPER PRODUCTS are used extensively by the manufacturers of electric and diesel-electric locomotives for such purposes as field coils, armature coils and commutator bars of traction motors, generators and auxiliary machines and also for components of control equipment and pantograph wearing strips.

(Illustrated) Bolton's Copper Plates used in the Greek locomotives manufactured by Breda Elettromeccanica E Locomotive—Milan—for the Greek Ministry of Transport



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## OFFICIAL NOTICES

### COUNTY BOROUGH OF BOLTON

DEPUTY TRANSPORT MANAGER

APPLICATIONS are invited for this appointment, salary £1,220 rising by four annual increments of £55 to the scale B maximum of £1,440 per annum.

Forms of application and particulars of terms and conditions of appointment may be obtained from the undersigned, to whom applications should be delivered not later than March 22.

PHILIP S. RENNISON, Town Clerk.

### KUMASI MUNICIPAL COUNCIL

ENGINEER TRANSPORT MANAGER

ENGINEER Transport Manager required by the Kumasi Municipal Council, Ghana either (i) on agreement with prospect of permanent and pensionable terms with salary scale (including Overseas Pay where applicable) £1,750 rising to £1,850 a year or (ii) on contract for two tours of 18 to 24 months in first instance with fixed salary of £2,190 a year and gratuity at rate of £150 a year. Furnished quarters at reasonable rent. Free passages for officer, wife and up to three children under 13 years of age. Liberal leave on full salary. Candidates, under 45 years of age, must be A.M.I.Mech.E. and have served an apprenticeship of at least five years with a reputable organisation maintaining or manufacturing road transport vehicles. They must have had extensive experience in running and maintaining a fleet of vehicles both petrol and diesel, preferably Albion, Daimler and Seddon buses, and plant, and the use of workshop tools and machinery. They must be acquainted with modern workshop practice and have had operational administrative experience. Application (in sealed envelope) showing full name and address, date and place of birth, marital status, education, professional qualifications, present and previous appointments together with names and addresses of three referees should be forwarded to the Town Clerk, Municipal Council, P.O. Box 40, Kumasi, Ashanti, Ghana, to reach him not later than March 14, 1958.

## LETTERS TO THE EDITOR

# Automatic Warning Control

*The Editor is always glad to receive letters from readers on subjects germane to the transport industry, but these should be written as concisely as possible. The opinions expressed therein must not, however, be regarded as having editorial endorsement. Where correspondents desire to use a nom-de-plume it is essential that the Editor should be informed of the name and full address of the writer as indication of good faith.*

SIR,—If it is held to be imperative drivers should have some warning at distant signals, why not experiment with a winking-light system. It already operates successfully at zebra crossings, on the rear of motor cars and on buoys at sea.

Put in a short-track circuit (one rail length), 300-400 yd. outside the distant signal, occupation of this track circuit to start a small beamed amber winking light at, or in advance of the distant signal. Distance between track circuit and amber winking light should not be more than 300 yd. and the light made to operate for say 20-30 sec. The light would operate irrespective of whether the signal is "on" or "off."—Yours faithfully,

W. ROSE.

19 *Darley Road,*
*Manchester,* 16.

[The Aga flashing distant signal was used on certain railways before the adoption of yellow as the colour of distant arms and lens. Editor, MODERN TRANSPORT.]

SIR,—I have just read with feelings that can only be described as sheer astonishment, the letter in your February 22 issue from Mr. Rose, wherein he advocates a modified version of automatic train control.

Does he really intend to be taken seriously? Where does he want his home signals? At nothing less than full braking distance from the fouling point, presumably. One feels tempted to develop his argument regarding lack of vigilance one stage further, and dispense with distants altogether, it being assured that under his system trains will be halted in time even if the home is run through. Signals have to be passed at danger sometimes, as all who have any experience of operating well know; must now the driver stop and then get down to reset the mechanism and thereby add needlessly to the delay?

I had the good fortune recently to attend a lecture at which the principles of the new B.T.C. system were explained and demonstrated. I need hardly say that I was most impressed, and would venture to suggest that had Mr. Rose been present he, too, might have realised what a valuable safeguard the newly standardised automatic warning control affords.—Yours faithfully,

C. F. WELLS.

76 *Sandlands Road,*
*Walton-on-the-Hill, Tadworth,*
*Surrey.*

### *Engines for Main-Line Diesels*

SIR,—The announcement of the recent inaugural run of a main-line locomotive again brings to light the preponderance of Continental diesels purchased by British Transport Commission under the present modernisation scheme. At a time when the locomotive industry requires all the encouragement and stimulus the Government can give, it is difficult to understand the policy of B.T.C. when it is realised that 75 per cent of the diesels for main-line projects bear such Continental names as M.A.N., Sulzer and Maybach; and undoubtedly the general inference of superiority of Continental design will not be lost on overseas buyers.

In the past, prior to "dieselisation," little encouragement was given to the British designers and they perforce sold direct into the overseas market, in which they held their own against strong American and Continental influence, which was backed by operating experience gained on their own internal railways. A further disturbing feature of the trial was the prominence given in the daily Press to the failure of one diesel, which will have brought dismay to many who have the welfare of British industry at heart and were not aware that this was the product of a Continental supplier.—Yours faithfully,

H. W. ROGERS.

14 *The Grove,*
*Isleworth, Middlesex.*

### *The Air Rail Proposals*

SIR,—The proposals for the Air Rail to London Airport are ingenious, and give rise to several queries. Firstly, this does not appear to be the true monorail, and it is to be feared that the peculiar shape of car will lead to design difficulties, both in arranging the seats and stowing away the motors. One can visualise the middle rows of seats being unpopular!

Secondly, one is tempted to wonder whether the design of car is being cramped in order to obtain the advantage of running on roads. Even with the present design, the size is such that special authority will have to be obtained; and it may well be that the worst of both worlds will result. Would it not be better to abandon entirely the idea of road running, so as to obtain the full advantage of the ample loading gauge that would be given by rail alone? This would necessitate the expense of a tunnel to the central terminal area, but would it not be better to face this now in order to obtain a system capable of future expansion?

It must be remembered that this would be, not only the link with London Airport, but the first example of a system which it is to be hoped will spread all over the country; and the uninformed public will judge the Alweg system (or monorail if used) by this pioneer scheme. Thus we come to the third and fourth points, that with a purely railborne system, the full advantage of electric traction can be obtained, and with steel wheels, the full speed potential could be investigated. In years to come a capacity of 4,000 passengers an hour may prove a serious handicap, and it is to be feared that rubber-tyred cars each with its own oil engines will not provide the flexibility for expansion that would be desirable.—Yours faithfully,

A. W. T. DANIEL.

3 *Hall Way.*
*Purley, Surrey.*

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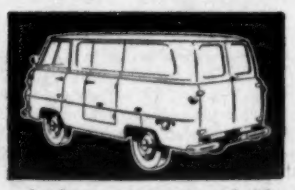

*The new Thames range includes a rear loading van—a rear and side-loading van—a chassis and cab—a chassis with cab fittings—a chassis and front end—and, AVAILABLE SOON, standard and de Luxe Estate cars. SEE THEM AT YOUR FORD DEALER—ASK FOR A DEMONSTRATION.*

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## CANNON STREET SIGNALBOX

(*Continued from page* 12)

of the indicator on the intermediate starting signal No. 20 to allow a train to run along the platform line is "5."

The new 167-lever frame, with electric interlocking, has 124 working levers. A number of spare levers has been provided with a view to incorporating Borough Market Junction box when it becomes necessary to rebuild it. There are 40 points, 48 running signals, 30 shunt signals and six detonator placers. There are three Walker train describers—one for Borough Market on the down local, one for Borough Market on the down through and one for Metropolitan Junction, with corresponding receiver instruments. A pointer moves on a clock face to any one of 12 descriptions on the dial of these instruments. It has not, of course, been possible to bring this equipment up to date in the recent hurried alterations as this form of describer with its somewhat limited range of train description is in use from Charing Cross over a wide area.

**Equipment**

There are four sets of block bells—for the local and through lines to and from Borough Market and for the Metropolitan Junction line and Metropolitan siding. There are three track diagrams conveniently placed above the frame; occupation of tracks is shown by red illumination. These diagrams were made at Wimbledon works for use pending the incorporation of Borough Market Junction operations. There is also a "next train to London Bridge" indicator for illuminating platform numbers on the concourse at Cannon Street.

The new box has been built, as all recent boxes have been, to fireproof standards; it is brick and glass with a concrete roof. Particular attention has been paid to fire precautions in the construction of the relay room, where Minerva fire detection equipment is also provided. There are radioactive detectors in the ceiling; a temperature rise causes a bell to sound and the next step is a release of carbon dioxide to quell the fire. The ground floor, besides including the relay room, houses the chief lineman's office, his workshop, the messroom, accumulator room and the gas-fired heating boiler. There are separate lavatories for signalmen and linemen.

Current supply is from Cannon Street substation, duplicate supply cables, at 220 volts 75 cycles. A Willesden transformer transforms it to 110 volts for signal circuits and a smaller transformer provides current at 12 volts for indication lights on the signal frame. The points, which include a number of heavy double slips, are operated at 130 volts, supplied from a large Nife battery, trickle charged by Westalite equipment. A 50-volt battery feeds route indicators, telephones and other services.

## OFFICIAL NOTICE

### ULSTER TRANSPORT AUTHORITY

CONTRACT FOR THREE 4,000-GALLON ROAD TANKERS

THE Authority invites tenders for:

3 Eight-wheel, 4,000 gallon, Dual-purpose Road Tankers.

Tender Forms, giving specifications, may be had on application to the Stores Superintendent, Duncrue Street, Belfast.

Applications for Tender Forms must be accompanied by a deposit of £1, which will later be returned provided a bona fide tender is lodged (whether successful or not), or provided the Authority is satisfied there was some good reason for not lodging a tender.

Tenders should be sent to the Secretary, Ulster Transport Authority, 21 Linen Hall Street, Belfast, in a sealed envelope, endorsed "Tender for Road Tankers," so as to be delivered not later than 5 p.m. on Friday, March 21, 1958.

An official receipt must be obtained for each Tender delivered by hand. Tenders sent by post should be registered.

The Authority does not bind itself to accept the lowest or any tender.

# SOCIAL AND PERSONAL

### Death of Mr. C. K. Bird

WE deeply regret to record the death in Saint Bartholomew's Hospital on February 28, at the age of 60, of Mr. Charles K. Bird, who retired as recently as January 31 from the general managership of the Eastern Region of British Railways. An editorial note appears on page 1 and an appreciation by Mr. Charles Hopkins, general manager of the Southern Region, on page 9. A memorial service was arranged for Friday, March 7 at Saint Botolph's Church, Bishopsgate, at 3.30 p.m.

* * *

We regret to record the death of Mr. H. H. Clayton, home service manager, F. Perkins, Limited, and manager of the engine rebuild department. He was 61.

* * *

Two joint home sales managers have been appointed by Guy Motors, Limited, Messrs. D. B. Griffiths and D. J. A. Mobsby. Sales manager of passenger vehicles is Mr. B. Foster and Mr. W. G. Dallard becomes manager of the export department.

* * *

Mr. T. C. B. Miller, A.M.I.Mech.E., M.I.Loco.E., who has been appointed motive power officer (Great Eastern) in the traffic organisation which has been set up on the Eastern Region of British Railways, was educated at Fulneck Boys' School near Leeds and served his apprenticeship in Doncaster locomotive works of the L.N.E.R. His first appointment in 1935 was as locomotive shed foreman in charge of the depot at Helensburgh in the Scottish Area, and after a period in the headquarters of the locomotive running superintendent he became assistant to the district locomotive superintendent at Burntisland in 1939. In 1941 Mr. Miller took charge of Haymarket locomotive depot, Edinburgh, and moved in 1942 to the headquarters of the locomotive running superintendent of the Eastern section of the Southern Area at Shenfield. He became district locomotive superintendent at Ardsley in 1943 and held a similar position at Cambridge from 1944 to 1947, when he became district locomotive superintendent at Stratford. This post was redesignated district motive power superintendent in 1948 and Mr. Miller remained at Stratford until 1955 when he became assistant motive power superintendent of the Eastern Region, from which post he has been appointed to his present position.

Mr. T. C. B. Miller

Mr. C. G. Palmer

* * *

The late Mr. Norman E. Box, of Heaton Mersey, left £121,161 nett (duty paid £60,912).

* * *

Mr. E. A. Croker hitherto commercial manager, has been appointed a director of Douglas Equipment, Limited.

* * *

Captain J. C. W. Last, O.B.E., has been appointed commodore of the P. and O. fleet on the retirement of Commodore C. E. Pollitt.

* * *

Mr. N. McDonald, deputy general manager, Bolton Corporation Transport Department, has been appointed general manager, Warrington Corporation Transport Department.

* * *

Mr. C. W. Powell has been appointed operating officer and Mr. A. E. Flaxman commercial officer, newly created posts in the Western Region traffic organisation.

* * *

Mr. J. P. Young, divisional manager, Scottish Division, B.R.S., has been appointed a member of the Transport Users' Consultative Committee for Scotland in place of Mr. J. B. Hastie, retired.

* * *

Mr. J. Russell Knowles recently retired after 25 years as managing director of Gulf Oil (Great Britain), Limited. Mr. N. Edmenson succeeds him.

* * *

Mr. G. M. Booth, hitherto district operating superintendent, Stratford, Eastern Region, has been appointed in the same position at Liverpool Street.

* * *

At the annual general meeting of the Association of British Travel Agents, Mr. J. J. Taylor, O.B.E. (Workers Travel Association), was elected chairman and Mr. C. Garstang (Thos. Cook and Son, Limited), vice-chairman.

* * *

Mr. R. G. Davies, hitherto Irish Ferry branch manager at Preston, has been appointed divisional traffic officer, North Western Division, B.R.S. He succeeds Mr. F. Lever, recently appointed Liverpool district manager.

* * *

The Institute of Traffic Administration will hold its annual conference at the Imperial Hotel, Blackpool, on May 16 to 18. The main business session, on the evening of Friday, May 16, will be devoted to a discussion on the future of road passenger stage services in the face of dwindling traffic resulting from competition from various forms of personal transport, and increasing costs. The members of a panel which will discuss questions submitted in advance will be: Messrs. H. Backhouse, O.B.E., H. Bottomley, general manager, Ribble Motor Services, Limited, R. Cox, general manager, Rochdale Corporation Transport Department, J. C. Franklin, general manager, Blackpool Corporation Transport and F. Douglas Walker. Other events include a visit to Preston Dock, and to Blackpool tram and bus depots. The annual dinner will be held on the evening of Saturday, May 17.

### A.E.R. Transportation Dinner

THE officers of the Army Emergency Reserve (Transportation) held their annual dinner in London on February 28. A large gathering was presided over by General Sir Brian Robertson, Hon. Colonel of the Transportation units of the A.E.R., who said that they were proud of the past and confident of their ability to serve in the future. It had been a year of reorganisation; there were now six squadrons corresponding to the regions of British Railways. He was confident the units would develop as word was passed round of the rightness of belonging to it. Recruiting was having good results. The principal guest was General Sir Nevil Brownjohn, Quartermaster-General to the Forces, who said that the success of the Mulberry Port used in the invasion of France was due to a combination of the regular sappers and the A.E.R. port men. The Royal Engineers Transportation Service was one of the most important corps he sponsored on the Army council. The new 165,000 Army required reserves immediately available, and that applied to Transportation and all the great specialised corps. During the evening guests were entertained to a programme of music by the band of the Corps of Royal Engineers, Aldershot.

* * *

Mr. C. G. Palmer, motive power officer (Great Northern) in the Eastern Region, B.R., was educated at the Denbighshire Technical College and joined the former L.N.E.R. in 1925 as an apprentice in the locomotive running engineer's department at Wrexham, transferring in 1929 to Doncaster plant. On completion of his apprenticeship he took up a position at King's Cross, subsequently moving to Hornsey motive power depot. In 1941 he became mechanical foreman, Doncaster, later serving in a similar capacity at Retford. In 1945 he was made shedmaster, Lincoln, where he remained for two years. In 1947 he took up the position of assistant district motive power superintendent, Peterborough, being promoted to district motive power superintendent, Peterborough, in 1955, which position he vacated to take up his new appointment.

* * *

Mr. C. Scutt, A.M.I.Mech.E., M.I.Loco.E., has been made motive power assistant in the office of the line traffic manager (Great Eastern), Liverpool Street. Since 1956 he had been assistant to motive power superintendent (utilisation) at Eastern Region headquarters.

* * *

At an informal gathering at Charing Cross Hotel on February 17 cheques were handed to Mr. S. F. Greene (general secretary of the N.U.R.) and Mr. A. Hallworth (general secretary, A.S.L.E. and F.) by Mr. L. T. Leonard, chairman of the S.R. branch of the Hospital Savings Association). Presiding was Mr. H. C. Lang, Southern Region establishment and staff officer. The cheques represented surplus funds of the branch after the fixed benefits had been paid.

**Mr. S. W. Smart, C.V.O., O.B.E., former superintendent of operation, Southern Region (he retired three years ago), had the honour of being presented to Her Majesty Queen Elizabeth, the Queen Mother, when she landed at Woodbourne Aerodrome in the South Island of New Zealand. Mr. Smart is spending the winter in that country with his son**

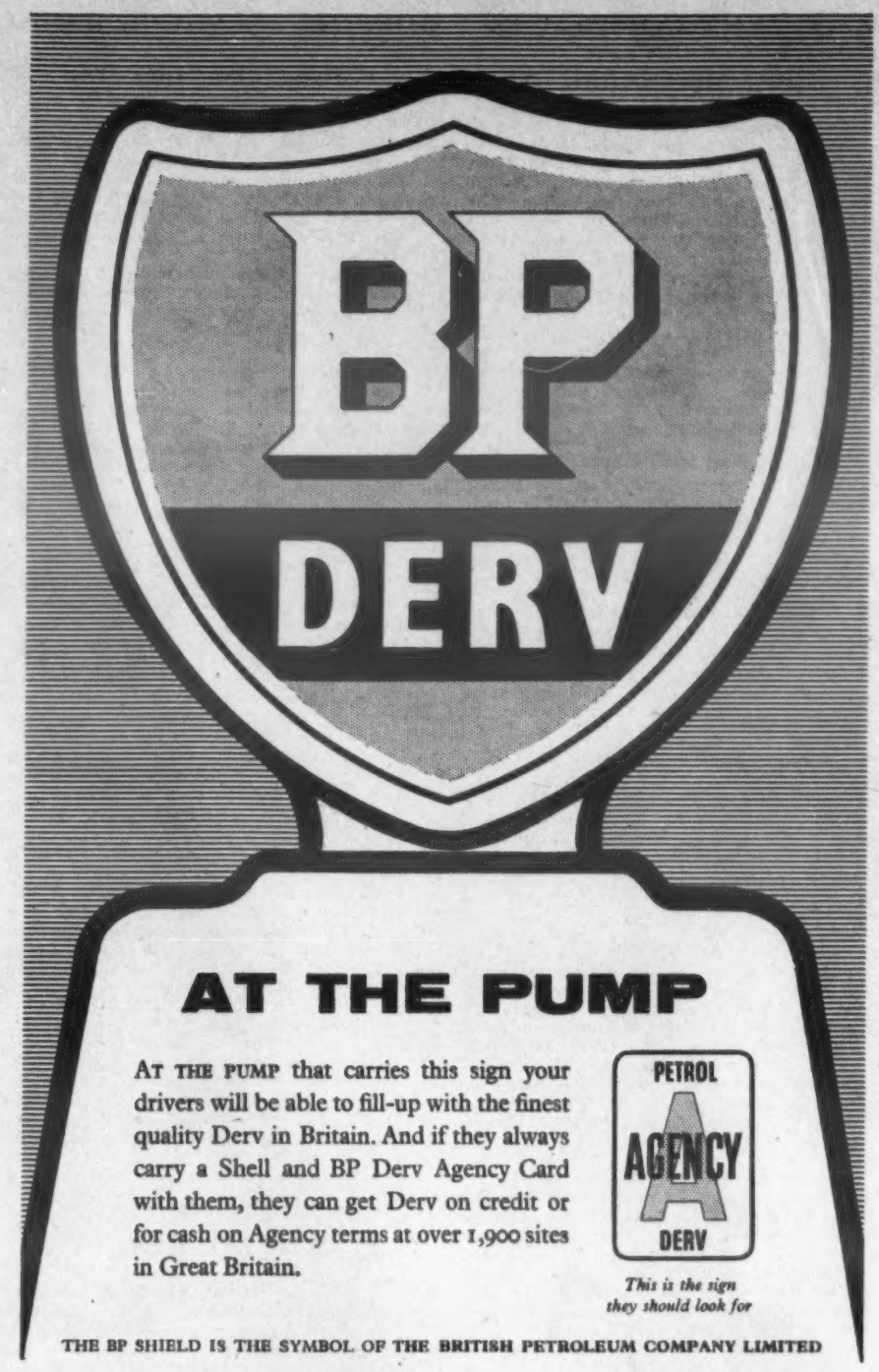
Mr. S. T. Clayton, motive power superintendent, London Midland Region, B.R., and his assistant, Mr. B. Adkinson, retired together on February 28 after 49 and 50 years' service respectively.

* * *

Mr. J. W. Lawrence, assistant traffic manager, West Yorkshire Road Car Co., Limited, has been appointed traffic manager. Mr. I. R. Kydd, assistant chief engineer of United Automobile Services, Limited, has been appointed chief engineer, Lincolnshire Road Car Co., Limited.

* * *

Mr. W. F. Wackrill, a director of Esso Petroleum Co., Limited, who retired on February 28, joined the Esso Transportation Co., Limited, in 1946 as general manager, becoming managing director. He became a director of the parent company in 1954. Prior to his association with Esso, Mr. Wackrill was Assistant Secretary, Ministries of Shipping and War Transport, during the war years 1939-45 and director of the Tanker Division in 1945-46.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## IMPORTANT CONTRACTS

### Ceylon Buys More British Buses

WITHIN two weeks of placing a £250,000 order for buses with the Leyland Motors group, the Ceylon Transport Board has placed a new contract worth £400,000 with the group for additional buses and bus bodies. The new order covers 80 Albion Aberdonian underfloor-engined complete buses and 20 bodies for Aberdonian chassis previously ordered. Metropolitan-Cammell-Weymann, Limited, is to supply all the bodies. Previous orders included 100 Leyland Comet, 60 Leyland Tiger Cub and 20 Albion Aberdonian buses, all of which, as well as many of the buses taken over by Ceylon Transport Board from established bus companies when the services were nationalised at the beginning of January, are powered by the internationally known Leyland O350 direct-injection diesel engine.

**B.R. Rolling Stock Contract**

The British Transport Commission has placed a contract with Charles Roberts and Co., Limited, for 90 24-ton covered hopper wagons. Designed to carry chemicals in bulk, they will have a welded steel body with two hinged roof doors for loading and discharge by four sliding-door outlets.

**B.P. Bunkers for Australian National Line**

All ships of the Australian National Line, the largest single operator of shipping in Australia, are now bunkered exclusively by B.P. Australia, Limited, Australian agent for B.P. International Oil Bunkering Service, which is represented at more than 200 ports on world shipping.

**Dunlop Spanish Agreement**

The Dunlop Rubber Co., Limited, has entered into an agreement with Sociedad Iberica de Gomas Y Amiantos S.A., Bilbao, under which Dunlop will provide technical aid in respect of products already manufactured by S.I.G.A. and others which are to be introduced. In part consideration, Dunlop will ultimately acquire a 20 per cent interest in the S.I.G.A. company.

**Large Gearbox Order**

A leading British commercial vehicle manufacturer has ordered 500 gearboxes from David Brown Industries, Limited. The gearbox ordered is a four-speed unit designed for a maximum torque of 166 lb./ft. Although constant-mesh gearing is fitted, provision has been made for the introduction of synchromesh mechanism if required. Prototype gearboxes for the customer were designed and built in the record time of 12 weeks and have since been successfully tested.

**De Havilland Propellers for Cosmopolitan**

Constant-speed feathering de Havilland propellers are to be fitted to the Canadair CL66 Cosmopolitan, a new version of the twin-engined Convair 440 transport aircraft powered by Napier Eland engines, which has recently been ordered for the Royal Canadian Air Force. A number of new safety features incorporated in the design includes an automatic drag-limiting control and a hydraulic pitch lock sensitive to loss of pressure or to loss of shaft torque. Limitation of propeller drag in the event of engine failure is achieved by automatically coarsening the pitch of the propeller blades in response to a hydraulic signal from the engine reduction gear.

## TENDERS INVITED

THE following items are extracted from the Board of Trade Special Register Service of Information. Inquiries should be addressed, quoting reference number where given, to the Export Services Branch, Board of Trade, Lacon House, Theobalds Road, London, W.C.1.

**March 14—Union of South Africa.**—Cape Provincial Administration for 11 205-in. wheelbase petrol or diesel BUS CHASSIS to take existing library bodies, and separately for RUNNING UNITS. Photocopies of tender documents from Export Services Branch, B.o.T., price 25s. (ESB/4459/58.)

**March 15—Union of South Africa.**—South African Railways for 20 items of non-ferrous OVERHEAD TRACK EQUIPMENT. Photocopies of tender documents from Export Services Branch, B.o.T., price 14s. (ESB/3888/58.)

**March 17—Formosa.**—International Co-operation Administration for four petrol-engined 6 by 4 LORRY CHASSIS and CABS for 26,000-27,000-lb. gross vehicle weight. Tenders to the Central Trust of China, Purchasing Department, 68 Yen Ping Nan Road, Taipei, Taiwan. ESB/3866/58/ICA.)

**March 19—Ceylon.**—Ministry of Transport and Works for five battery-electric FORK-LIFT TRUCKS (4,000 lb. at 20 in. to 9 ft.) and five spare sets BATTERIES; one diesel-electric MOBILE CRANE (10 tons at 15 ft. radius with a maximum radius of 35-40 ft.); 15 diesel-electric MOBILE CRANES (2 tons at 14 ft. and 10 cwt. at 30 radii); two side-operating slewing-head hydraulic FORK-LIFT CARRIERS (12,000 lb. at 24 in., battery or diesel powered); and three heavy-duty 2-ton battery-driven FIXED-PLATFORM TRUCKS with driving controls to one side for very long loads, with three spare sets of BATTERIES. Tenders to the Chairman, Tender Board, Ministry of Transport and Works, Colombo. (ESB/1213/58.)

**Export Opportunity—U.S.A.**—Tifco Inter-America Corp., 1939 West Gray, Houston, Texas, wishes to get into touch with United Kingdom manufacturers of COMPACTING-TYPE BODIES for refuse-disposal vehicles and small diesel-engined LORRY CHASSIS. Quote both F.O.B. and C.I.F. Port of Houston prices in U.S. currency. (ESB/4596/58.)

## SHIPPING and SHIPBUILDING

### Railway Container Ship

THE *Container Enterprise*, designed for the Irish shipping services of the British Transport Commission, has been launched by the Ailsa Shipbuilding Co., Limited, at Troon. This vessel, the first of two to be built at the Troon yard, is specially designed for the rapid handling of 65 British Railways containers between Heysham and Belfast to provide door-to-door service. The propelling machinery of 1,500 b.h.p., supplied by British Polar Engines, Limited, Glasgow, will give a service speed of 12½ knots.

### *Australian Tanker Subsidy*

GOVERNMENT construction subsidies in Australia are to be extended to tankers, it is announced. Financial assistance to the Australian shipbuilding industry has hitherto been applied only to vessels for coastal trade and while it is not the intention of the Government to extend the subsidy generally to ships for overseas trading, any similar proposals will be considered, it is stated.

### *Record Demurrage at Colombo*

ILLUSTRATIVE of the bad unloading record of Colombo is the news that demurrage of Rs.270,000, representing 69 days, has been paid to the owners of the Greek ship *Xoala*, chartered by the Food Department to carry rice, for time spent in Colombo. The Colombo Shipping Committee observes that this vessel holds the record for the highest demurrage paid to a foreign shipowner. It is also stated that the demurrage paid is about four times the cost of the rice cargo the *Xoala* brought to Colombo. Another ship, the *Nicholas*, was on demurrage for 59 days.

### *Future of Trincomalee*

THE Government of Ceylon has decided to appoint a committee to report on the development of Trincomalee harbour, both as a naval harbour and a commercial port. The Prime Minister, Mr. Bandaranaike, told the Cabinet that before deciding what role Trincomalee harbour should fulfill in the future, the Government should have the whole matter considered by a representative committee which could, if it wished, obtain the assistance of experts. The committee will investigate as to what part of the export and import trade could be diverted from Colombo to Trincomalee and what are the additional costs that are involved in transporting goods to and from Trincomalee and the chief centres of domestic supply and consumption. The committee will also be asked to report on the cost of developing this former British naval base.

## FINANCIAL RESULTS

NOTES on the trading results, dividends and financial provisions of companies associated with the transport industry are contained in this feature, together with details of share issues, acquisitions and company formations or reorganisations.

**Pullman Car**

The Pullman Car Co., Limited, had a gross operating revenue for 1957 of £889,507 (£829,999). Profit £128,060 (£127,522) less tax £56,576 (£55,363), leaving net profit £71,484 (£72,159 plus £6,716 unrequired tax). The company is in the market for 44 new Pullman cars as replacements.

**Orient Line**

The Orient Steam Navigation Co., Limited, is paying a dividend of 6 per cent tax free (same) on the ordinary shares for the year ended September 30, 1957. The fall in the operating profit from £957,380 to £420,598 was principally due to the closing of the Suez Canal, which resulted in the ships on the company's U.K.—Australia service only just covering their operating expenses, excluding depreciation.

**Vulcan Foundry**

In the year ended December 28, 1957, the Vulcan Foundry, Limited, reports a group loss after all charges, other than taxation, of £286,497 (group profit £139,469). Depreciation charged was £76,408 (£62,689). U.K. taxation was £2,000 (£64,662). Dividend on the ordinary stock nil (10 per cent). Re-equipment and modernisation of the works for diesel and electric locomotive output involved substantial expenditure and it was found impossible in the first part of 1957 to maintain turnover large enough to absorb this expenditure.

**P. and O. Steam Navigation**

A dividend of 11 (8) per cent is to be paid by the P. and O. Steam Navigation Company for the year ended September 30, 1957. Group net profit was £10,416,205 (£6,266,635) after tax. While some constituent members of the group were directly and severely hit by the closing of the Suez Canal, increased world-wide activity and high tramp rates substantially outweighed those adverse factors in the results of the group as a whole. During the latter part of the year the recession was "sudden and sharp."

**British India Steam Navigation**

A final dividend on the ordinary shares of 2 per cent, making a total of 10 per cent (same) for the year ended September 30, 1957, is being distributed by the British India Steam Navigation Co., Limited. Group net profit after tax was £3,243,694 (£1,944,618), but it is pointed out that the company and its shipowning subsidiaries enjoyed exceptionally favourable trading conditions owing to the Suez diversion. Before the close of the period, however, it had become clear that the freight market had weakened to a serious extent with little prospect of any early recovery.


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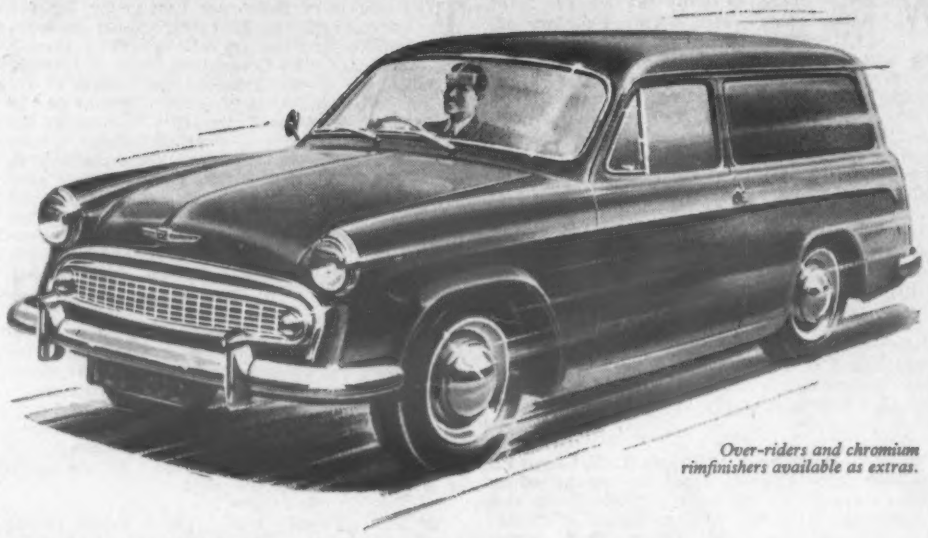

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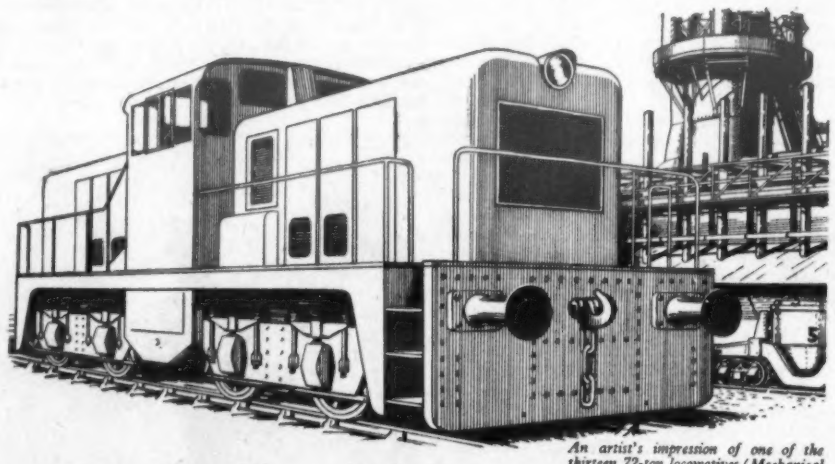
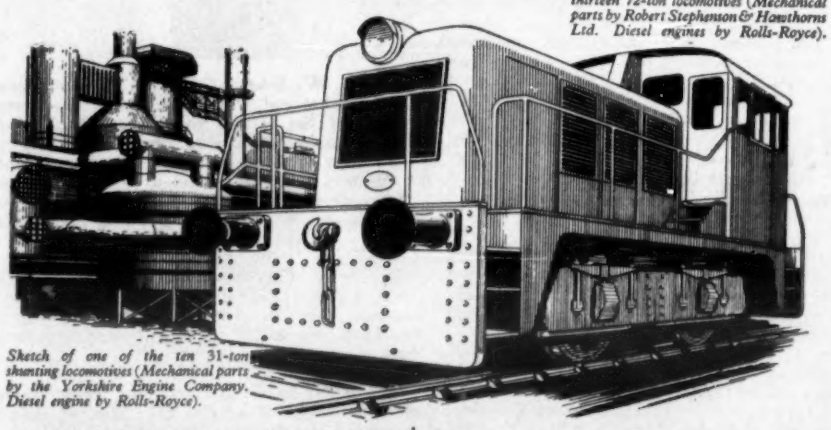


*An artist's impression of one of the thirteen 72-ton locomotives (Mechanical parts by Robert Stephenson & Hawthorns Ltd. Diesel engines by Rolls-Royce).*



*Sketch of one of the ten 31-ton shunting locomotives (Mechanical parts by the Yorkshire Engine Company. Diesel engine by Rolls-Royce).*

British Thomson-Houston, as a constituent Company of the Indian Steelworks Construction Company (ISCON), has in hand orders for a total of 23 diesel-electric locomotives for use in the Government of India's Durgapur Steelworks. The electrical equipment of the thirteen 72-ton Bo-Bo units and ten 31-ton 0-4-0 units will be of BTH design and construction throughout.

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